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ABSTRACT

The K-12 Model Course of Study in Economics (MCSE) provides Ohio school district personnel with assistance in the development and implementation of economics courses of study for kindergarten through twelfth grade. The guide also offers information to help readers integrate economics into their curricula across disciplines. In addition to an introduction, chapters include: (1) "Description of a Course of Study"; (2) "Developing a Course of Study"; (3) "Using the Program, Subject, and Pupil Performance Objectives"; (4) "Program, Subject, and Pupil Performance Objectives"; and (5) "Pupil Evaluation Policy." References, a glossary of terms, and subject objectives by grade level conclude the text. (EH)

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K-12 MODEL COURSE OF STUDY IN ECONOMICS

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OHIO COUNCIL ON ECONOMIC EDUCATION

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THE OHIO ECONOMIC EDUCATION NETWORK

The Ohio Council on Economic Education is an independent, statewide nonprofit organization that includes a network of eight regional Ohio Centers for Economic Education. The mission of the Ohio Council is to encourage and service better economic education in Ohio, primarily for elementary and secondary school students. This mission to improve the quality and increase the quantity of economic concepts and principles taught focuses on curriculum through better prepared instructors, using effective teaching materials and techniques.

The Economic Education Unit of the Ohio Department of Education supports a statewide program designed to promote economic education as part of the elementary, secondary, and adult curriculum in Ohio. The Unit provides K-12 teachers with curriculum assistance, inservice programs, and other resources.

Readers who wish assistance in the use of the **K-12 Model Course of Study in Economics,** and other economic services available to Ohio school districts, should contact the Ohio Council, the nearest Ohio Center, or the Economic Education Unit.

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INTRODUCTION

The United States is committed to an economic system that places a high value on individual decision-making. All citizens have to make many important economic decisions during their lifetimes, and to make informed and intelligent choices, they need to develop basic economic understandings and skills. These understandings and skills are best acquired through a program of economic education that is systematically integrated into the curricula of school districts.

Ohio is one of many states that have recognized the importance of including economics in the education of its citizens. One example of this was the adoption of Rule 3301-35-02 B (13) of the Minimum Standards for Elementary and Secondary Schools in 1983. This Rule required that a one-half unit of economics be scheduled and operated in separately organized classes within the forty-five units required for grades nine through twelve.

While economic education at the high school level is important, it is even more important to begin the process of providing students with the decision-making skills that a knowledge of economics provides during the elementary school years. This instruction should then continue in later school years by integrating economics into a variety of courses, such as social studies, business education, home economics, and mathematics.

The K-12 Model Course of Study in Economics (MCSE) provides Ohio school district personnel with assistance in the development and implementation of economics courses of study for kindergarten through twelfth grade. It is intended primarily for curriculum resource groups whose task it is to spell out the grade placement and most appropriate methods of teaching economics throughout these grade levels. It can also be a valuable resource for teachers. The Minimum Standards for Elementary and Secondary Schools in Ohio require that a course of study be adopted for each subject taught. By utilizing the required course of study format, the K-12 MCSE can be used by any Ohio school district.

Included in the K-12 MCSE are recommendations for the following required components of a course of study:

- A program philosophy
- A program goal
- A scope and sequence:
    - program objectives
    - subject objectives
- A pupil evaluation policy

In addition, the K-12 MCSE includes information designed to help readers integrate economics into their curricula. The following page describes the organization of the K-12 MCSE and provides suggestions for its use.

HOW TO USE THE K-12 MODEL COURSE OF STUDY IN ECONOMICS

I. DESCRIPTION OF A COURSE OF STUDY

Contents:	A brief overview of the components of a course of study.
Advice to Reader:	Those who are familiar with the construction of a course of study may skim this section, or skip ahead to II or III.

II. DEVELOPMENT OF A COURSE OF STUDY

Contents:	Definitions of selected components of a course of study and a procedure to follow to develop these components. Recommended program goal and philosophy statements.
Advice to Reader:	Those familiar with the development of a course of study may skim the first part of this section, but should review the program goal and program philosophy that appear on page 6.

III. USING THE PROGRAM, SUBJECT AND PUPIL PERFORMANCE OBJECTIVES

Contents:	An explanation of the development and presentation of the objective statements found in section IV. A diagram of the Circular Flow of Economic Activity.
Advice to Reader:	Read this section carefully before reading IV.

IV. PROGRAM, SUBJECT, AND PUPIL PERFORMANCE OBJECTIVES

Contents:	Nine recommended program objectives and the corresponding subject and pupil performance objectives for a K-12 Course of Study in Economics.
Advice to Reader:	These objectives represent a comprehensive K-12 economics program.

V. PUPIL EVALUATION POLICY

Contents:	Suggested procedures for evaluating the performance of students in economics.
Advice to Reader:	Use this section to assist in formulating an evaluation policy for your school district, and to identify standardized achievement tests that can supplement teacher-made tests.

I. DESCRIPTION OF A COURSE OF STUDY

> A course of study is ... the official statement of what shall be taught in each program in a school district ... it represents an educational commitment on the part of the board of education responsible for approval and school personnel who develop and implement it. As a form of communication, it tells school personnel clearly and precisely what is to be taught in a given subject or a program for a particular grade.[1]

The Minimum Standards for Elementary and Secondary Schools in Ohio provide that courses of study be submitted to the Ohio Department of Education by a school district or system for approval and review every five years. Each course of study must include an official statement of approval by the appropriate board of education.

The Ohio Department of Education has suggested that each course of study should include the following components:

1. A Cover Sheet
2. A Statement of Approval by the Board of Education
3. A Table of Contents
4. Introduction

**5. District Philosophy and Goals
6. Program Philosophy
7. Program Goal(s)
**8. Scope and Sequence:
    A. Program Objectives
    B. Subject Objectives
**9. Pupil Evaluation Policy

In the development of a course of study, it is critical that the process be guided by an understanding that even though separate sections are written for philosophy, goals, scope and sequence, and pupil evaluation policy, the document produced must exhibit a consistency and continuity derived from an overall perspective. Each section of the course of study should support and extend the section that precedes it. The logic of progression from section to section must be clear and unambiguous. While only the components marked by the asterisks are required by law or minimum standards, it is recommended that all of the listed components be included in order to provide cohesiveness and usefulness.[2]

A Curriculum Development Model has been suggested by the Ohio Department of Education as a guide to school district personnel that are charged with the task of writing courses of study. In this model, shown in Exhibit 1, the course of study is seen as a prerequisite to the development of instructional guides (a recommended, but not required, activity) and daily lesson plans. Therefore, daily instruction in a subject area is linked to the goals and objectives that have been identified in the course of study.

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* Required by the Revised Code.

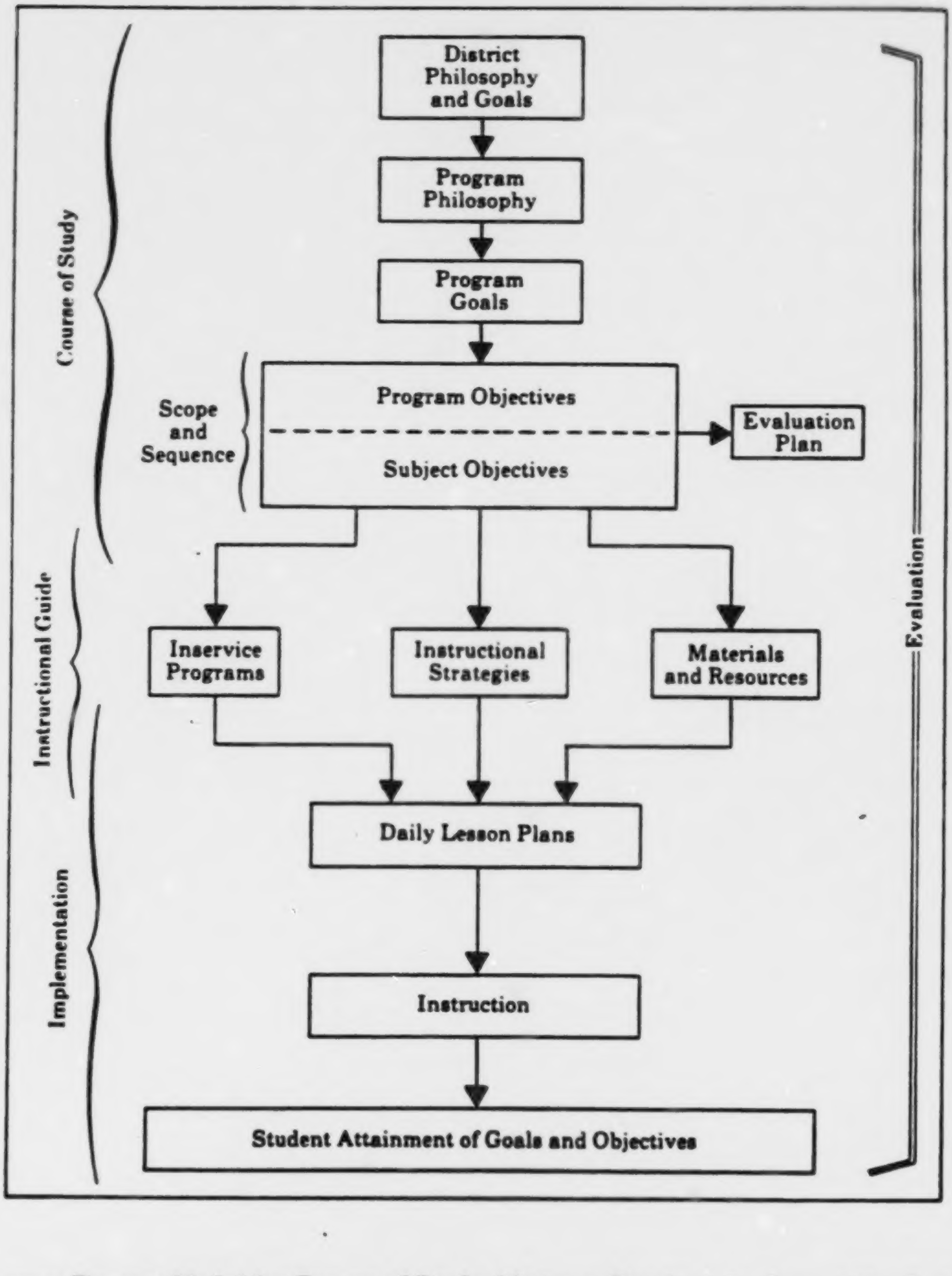
** Required by the Minimum Standards for Elementary and Secondary Schools.

[1] **Process Model for Course of Study,** Minimum Standards Implementation Series, Ohio Department of Education (Columbus: 1983), p. 13.

[2] Ibid., p. 20

Exhibit 1

CURRICULUM DEVELOPMENT MODEL


Course of Study
Instructional Guide
Implementation
District Philosophy and Goals
Program Philosophy
Program Goals
Scope and Sequence
Program Objectives
Subject Objectives
Evaluation Plan
Inservice Programs
Instructional Strategies
Materials and Resources
Daily Lesson Plans
Instruction
Student Attainment of Goals and Objectives
Evaluation

Source: **Process Model for Course of Study**, Minimum Standards Implementation Series, Ohio Department of Education (Columbus: 1983), p. 16.

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II. DEVELOPING A COURSE OF STUDY

The following step-by-step procedure may be used by Ohio school district personnel to develop a K-12 course of study in economics. Much of the material in this section has been taken from the booklet **Process Model for Course of Study.**[1] Readers who wish additional assistance in the development of courses of study should consult this document.

STEP 1: Development of a Program Philosophy

The process of writing a course of study should begin with the development of a philosophy for the economics program. Those involved in this process often include representatives of a school district's community, in addition to curriculum specialists and other educators.

> A **program philosophy** is a statement that describes a program's educational purpose and rationale based on a school district's philosophy.[2]

The program philosophy should contain clearly stated beliefs about what understandings students need and/or the overall contribution a program can make toward the general purposes of a formal education. In developing a philosophy for an economics program at the K-12 grade levels, various questions should be considered. Among these are:

What is the purpose of the economics program?
How does the program fit into the overall curriculum?
How important is it for economics to be integrated into the K-12 grade levels?
How is the program philosophy related to the district philosophy?

As these questions are considered, school district representatives should understand the key elements of an economic education program. The publication **A Framework for Teaching the Basic Concepts** outlines what these key elements are:

* Mastery of the basic concepts. Economics has its own tools of analysis that students should understand.
* An appreciation of how the principal concepts of economics relate to each other. Such an appreciation enables students to deal with the complex economic problems they will face as adults.
* Knowledge about major economic concerns - both public and personal. Such knowledge and some understanding of how public and personal economic issues relate to each other provide a basis for grasping how individual actions shape and are shaped by economic forces.
* Exercise of a reasoned approach to economic decisions. Economic decisions can be reached more effectively if an objective, orderly, and reasoned approach replaces emotional, unreasoned judgments.[3]

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[1] This document may be obtained by contacting The Ohio Department of Education, Division of Elementary and Secondary Education, 65 S. Front Street, Columbus, Ohio 43266-0308; (614) 466-2761.

[2] **Process Model**, p. 8.

[3] **A Framework for Teaching the Basic Concepts**, P. Saunders, G.L. Bach, J.D. Calderwood and W.L. Hansen, 2nd ed., Joint (National) Council on Economic Education, 1984, p. 6.

A recommended program philosophy statement follows. Ohio school district representatives may adopt this statement or use it to aid in the development of their own program philosophy.

Program Philosophy for K-12 Economics

> As the local, state, and national economies have become more complex, it has become increasingly apparent that the future growth of productivity and the standard of living of all citizens requires that they be able to understand economic issues and make informed economic decisions. The ability to make such informed decisions is a basic skill that can be applied to a wide range of subject areas. The most effective way to acquire these skills is through an integrated economic education program that begins at the early elementary grades and is continued through higher grade levels.

STEP 2: Development of Program Goals

Those who are responsible for determining a school district's program philosophy should also develop the program goal(s). Program goals should be related to key elements of the district and program philosophies.

> **Program goals** are broad statements of desired outcomes for a program. Program goals define the overall nature and content of the program and represent an intermediate step in translating a program philosophy into specific objectives.

Ohio school district personnel may choose to adopt the following recommended program goal statement.

Program Goal for a K-12 Economics Program

> Students will know, understand, and apply the fundamental principles of economics and the economic system of the United States.

STEP 3: Development of a Scope and Sequence

Following the development of a program philosophy and program goal(s), the task of developing the scope and sequence component of the course of study must be undertaken. The scope and sequence consists of selected program objectives and subject objectives.

> **Program objectives** are broad outcome statements derived from program goals. The program objectives span grade levels, and serve to reflect and define the nature and content of the program area.
>
> **Subject objectives** are more specific than program objectives and indicate the desired learning outcomes for a given grade level or specific subject. Subject objectives facilitate grade level planning and assessment and are the basis for student grading. Subject objectives can be used as a guide for writing daily lesson plans, which are not part of a course of study, but are used to help achieve program and subject objectives.[5]

[4] **Process Model,** p. 25.

[5] Ibid., pp. 29-31.

The recommended program and subject objectives of the K-12 MCSE are contained in section IV. These are presented in a sequential order, so that the most fundamental objectives appear first, and serve as prerequisites for the objectives that follow. School district personnel have the responsibility to determine the grade level placement for these objectives. A matrix containing suggested grade levels for the introduction of subject objectives is found on pages 131-139.

STEP 4: Pupil Evaluation Policy

The final required component of Ohio courses of study is a pupil evaluation policy. The evaluation policy should include selection or development of assessment devices that will measure how well the program and subject objectives have been achieved. These devices may include tests (essay or objective), quizzes, written assignments, and the like. Tests may be written by the teachers themselves, or teachers may use standardized tests, if these are available.

Section V of the K-12 MCSE provides guidance for the development of a pupil evaluation policy for the K-12 economics program, including suggested test instruments.

Although not required for an economics course of study, Ohio school districts may develop pupil performance objectives in order to make the most effective use of the K-12 MCSE.

> A **pupil performance objective** is a statement derived from a prescribed goal and objective delineating an expected student outcome as an observable behavior or product of behavior.[6]

Pupil performance objectives are similar to subject objectives in that each states an observable behavior that is the result of accomplishing an objective. Unlike subject objectives, however, pupil performance objectives contain condition and criteria levels.

The condition component of a pupil performance objectives describes how the student will be required to perform a task or use a skill. The criterion component of a pupil performance objectives describes how well the student must be able to do a task or skill. Further explanation of the components of the pupil performance objectives and how to write them may be found in the **Process Model.**[7]

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[6] Ibid., p.8.

[7] Ibid., pp. 47-50.

III. USING THE PROGRAM, SUBJECT AND PUPIL PERFORMANCE OBJECTIVES

The recommended program objectives and subject objectives for the K-12 MCSE are presented in section IV. The pages of the present section explain how the program and subject objectives were developed, and how they are presented in section IV. This information is contained in the answers given to the following questions.

QUESTION #1

What are the economic understandings, or objectives, that our students should achieve by the end of the twelfth grade?

Few curriculum specialists have the training in economic education needed to answer this question effectively. The K-12 MCSE provides nine recommended program objectives that define the economic understandings students should have by the end of the twelfth grade. The nine program objectives are listed on page 16. On subsequent pages, each of the program objective statements is followed by a description and a number of related subject objectives.

The program and subject objectives were developed by a committee that consisted of representatives of the Ohio Council on Economic Education and its affiliated Centers for Economic Education, the Economic Education Unit of the Ohio Department of Education, and selected Ohio K-12 educators.

QUESTION #2

To have an effective economics program, must our school district adopt all of the recommended program and subject objectives?

The nine program objectives should be considered components of a comprehensive economics program. The program objectives are arranged in a hierarchy, so that the first is the most basic outcome statement and forms a foundation for understanding the second. Similarly, the third program objective builds upon the second, and so on.

For various reasons, some school districts may choose to emphasize some of the objectives more than others. One of the tasks of a school district's curriculum writers is to determine which objectives should be emphasized. Some school districts may adopt some of these objectives, others may choose to adopt all nine, and still others may wish to go beyond those that are recommended.

QUESTION #3

Our school district would be interested in developing a course of study for economics, but our curriculum writers and teachers do not have a strong background in economics. How will we be able to understand the terms and concepts contained in the program and subject objectives?

A descriptive statement has been written for each of the nine program objectives. Each statement provides an overview of the economic concepts to which the program objectives, and their related subject objectives, refer. Some terms used in the narrative are defined in the glossary. These terms are printed in **boldface** the first time they appear.

Exhibit 2 reproduces the program philosophy and goal statements from section II and provides an example of how the program and subject objectives are presented. Program objective A is used in this example, along with three of the eight corresponding subject objectives. Terms that appear in **boldface** in the subject objectives are defined in the glossary.

Exhibit 2

ORGANIZATION OF RECOMMENDED COMPONENTS OF THE K-12 MODEL COURSE OF STUDY IN ECONOMICS

Program Philosophy for a K-12 Economics Program

As the local, state, and national economies have become more complex, it has become increasingly apparent that the future growth of productivity and the standard of living of all citizens requires that they be able to understand economic issues and make informed economic decisions. The ability to make such informed decisions is a basic skill that can be applied to a wide range of subject areas. The most effective way to acquire these skills is through an integrated economic education program that begins at the early elementary grades and is continued through higher grade levels.

Program Goal

Students will know, understand, and apply the fundamental principles of economics and the economic system of the United States.

Program Objective A:

Upon completion of the twelfth grade, students will know, comprehend, analyze, and/or evaluate how individuals and societies make choices to satisfy wants with limited resources.

Subject Objectives

1. The student will recognize that all people have **wants.**

Pupil Performance Objectives

1. The student will define want(s).
2. The student will identify consumers as people whose wants are satisfied by using goods and services.
3. The student will define a service(s).
4. The student will list services their teacher provides for them, and name other ways that these services might be provided if the teacher did not provide them.
5. Given the definition of wants, the student will list five goods and five services that the individual, household, and community may desire. The student will explain why each may not be able to have all their wants satisfied.
6. The student will compare wants for goods and services among individuals in the classroom.
7. The student will contrast desires for goods and services among individuals in the classroom and explain why there are differences.
8. Given a magazine, the student will select five items they would like, and explain why they want these items.
9. The student will recognize and demonstrate how they consume goods and services in order to satisfy wants.
10. The student will explain how scarce resources are used to produce the goods and services needed to satisfy people's wants.
11. The student will draw a self-portrait and draw pictures of ten items they want around the portrait. Students will compare self-portraits and infer that wants are unlimited and are a matter of personal choice.
12. The student will read the fairy tale, The Three Wishes. Each student will explain the conflict between unlimited wants and limited resources by dramatizing the story.

The "Key Concepts" to which the subject objectives are related are taken from **A Framework for Teaching the Basic Concepts.**[1] The **Framework** defines and describes over twenty basic concepts that form a foundation for understanding economics (see Exhibit 3). Ohio educators who use the K-12 MCSE will find the **Framework** to be a valuable resource. **Teaching Strategies** volumes that contain strategies for teaching the basic concepts at various grade levels are also available from the National Council on Economic Education.[2]

Educators who have had little formal training in economics are encouraged to ask for information about economics courses and workshops offered through the Ohio Centers for Economic Education (see page iii).

QUESTION #4

At what grade levels should each of the subject objectives be introduced?

The determination of the grade level at which learning objectives should be met is a decision that must be made by school district personnel. Some readers may find useful the K-12 MCSE's suggestions of grade levels at which to introduce subject objectives (see pages 131-139).

The K-12 MCSE's subject objectives may be used by school districts to develop pupil performance objectives, or PPOs. Exhibit 4 illustrates some examples of PPOs that have been written for one of the K-12 MCSE's subject objectives. The reader will notice that a recommended grade level has been assigned to each of the PPOs. This example shows how a given subject objective may span more than one grade level.

QUESTION #5

Are there other resources that our school district can use to help us integrate economics into the K-12 grades?

Yes! There is no shortage of materials available to educators to help teach economics at these grade levels. These include printed materials, films, video tapes, computer programs, etc. some of these materials may be obtained at little cost. Contact the Ohio Council on Economic Education for more information and how many of these resources may be obtained.

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[1] **A Framework for Teaching the Basic Concepts,** p. 11.

Exhibit 3
KEY ECONOMIC CONCEPTS

FUNDAMENTAL ECONOMIC CONCEPTS

1. Scarcity
2. Opportunity Cost and Trade-offs
3. Productivity
4. Economic Systems
5. Economic Institutions and Incentives
6. Exchange, Money, and Interdependence

MICROECONOMIC CONCEPTS

7. Markets and Prices
8. Supply and Demand
9. Competition and Market Structure
10. Income Distribution
11. Market Failures
12. The Role of Government

MACROECONOMIC CONCEPTS

13. Gross National Product
14. Aggregate Supply
15. Aggregate Demand
16. Unemployment
17. Inflation and Deflation
18. Monetary Policy
19. Fiscal Policy

INTERNATIONAL ECONOMIC CONCEPTS

20. Absolute and Comparative Advantage and Barriers to Trade
21. Balance of Payments and Exchange Rates
22. International Aspects of Growth and Stability

Source: Reprinted from **A Framework for Teaching the Basic Concepts**, 3rd ed., copyright 1993, The National Council on Economic Education, New York, New York, NY, p. 14.

Exhibit 4
EXAMPLES OF PUPIL PERFORMANCE OBJECTIVES

Program Objective A

Upon completion of the twelfth grade, students will know, comprehend, apply, analyze, and/or evaluate how individuals and societies make choices to satisfy wants with limited resources.

Subject Objective 2

The student will explain how factors of production (productive resources) are used to produce goods and services.

Suggested Grade Level	Pupil Performance Objective
Grade 2	The student will understand that human effort (labor) is related to the production of goods and services.
Grade 4	The student will identify examples of land resources (e.g., water, trees, and other natural resources).
	The student will understand that land resources and labor resources (or human effort) are used to produce goods and services.
Grade 6	The student will identify examples of capital resources (e.g., a shovel, a machine, buildings, etc.).
	The student will understand that capital resources are goods that are used to produce other goods and services.
	The student will describe how using a capital good (e.g., a shovel) can help make labor resources more productive.
	The student will explain how individuals exchange their labor resources for money income.
Grade 8	Given a list of resources, the student will classify them as examples of land, labor, or capital.
	The student will understand that the effort of an entrepreneur (entrepreneurship) is a resource, and that an entrepreneur assumes the risk of establishing and maintaining a business firm.
	The student will identify the payments received by resource owners: rent (land), wages (labor), interest (capital), and profit or loss (entrepreneurship).
	The student will use a circular flow of economic activity to understand how households and business firms exchange resources for money, and money for goods and services.

Grade 9	The student will understand that resources are unequally distributed among regions and nations, and that this leads to interdependence and trade.
Grade 10	The student will identify goods and services that are produced in Ohio and sold in other states, or to citizens in other countries.
	The student will identify goods and services that are produced in states other than Ohio, or that are imported into Ohio from other nations.
	The student will understand how the availability of resources helps to determine the goods and services that are produced in Ohio and those that are produced in other states or foreign nations.
Grade 12	The student will define entrepreneurship and understand the role played by entrepreneurs in a market economy.
	The student will explain the role played by the profit motive as an incentive for entrepreneurs to begin and maintain business firms.
	The student will name entrepreneurs who helped to develop companies and industries in the United States (e.g., Henry Ford, Mary Kay Ash, Berry Gordy).

Exhibit 5
CIRCULAR FLOW DIAGRAM

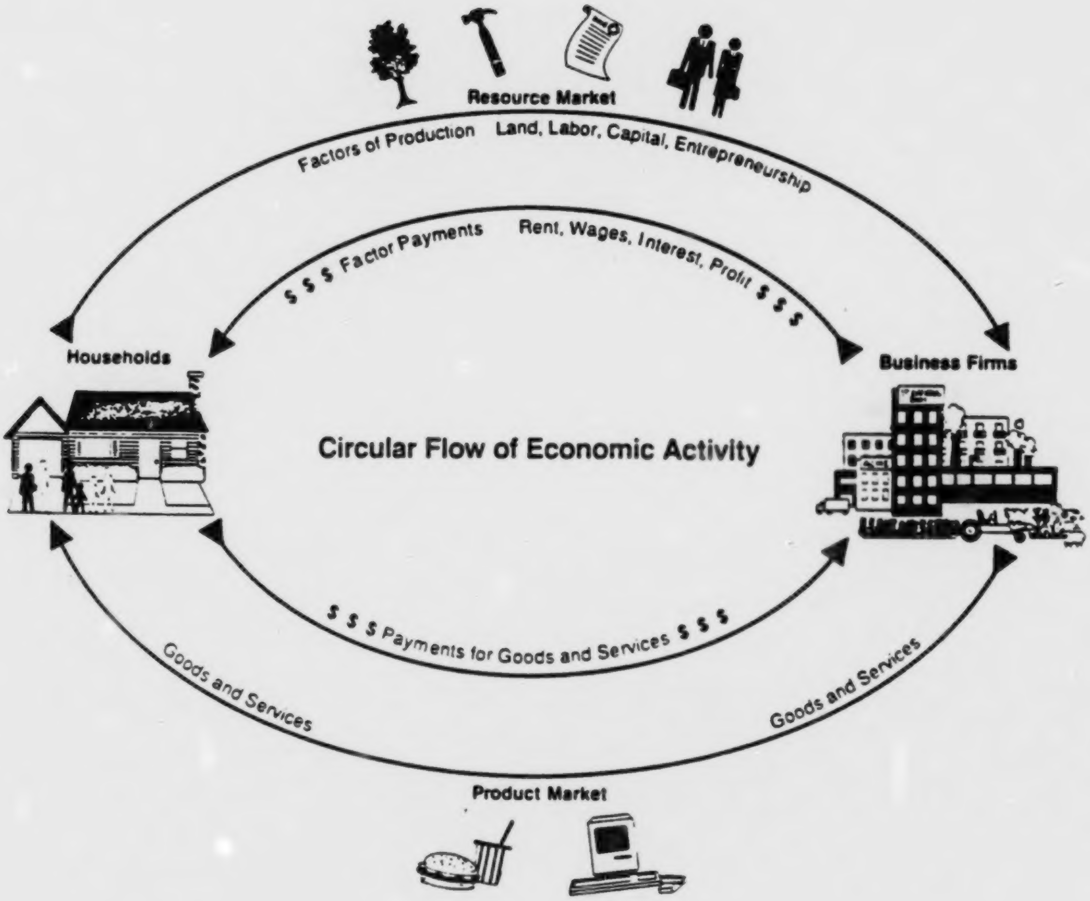
Resource Market
Factors of Production
Land, Labor, Capital, Entrepreneurship
$ $ $ Factor Payments
Rent, Wages, Interest, Profit $ $ $
Households
Business Firms
Circular Flow of Economic Activity
$ $ $ Payments for Goods and Services $ $ $
Goods and Services
Goods and Services
Product Market

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Exhibit 5 (continued)
CIRCULAR FLOW DIAGRAM

The nine recommended program objectives that are listed on page 16 define the economic understandings that students should achieve by the end of twelfth grade. Economic educators at all grade levels will find the Circular Flow of Economic Activity (also called the Circular Flow Model) to be a useful tool to illustrate many of these understandings, and how they are interrelated.

The circular flow diagram on page 14 shows how different parts of an economy (called sectors), are linked through the trade of "real items" (resources, goods, and services) for money. Readers may find it useful to refer to this diagram as they read through section IV.

The left hand portion of the circular flow diagram represents the household sector of the economy. Households own the factors of production (land, labor, capital, and entrepreneurship) and trade the services provided by these factors to business firms (these firms represent the business sector shown on the right hand side of the diagram) for income, or factor payments. The top portion of the diagram shows that this trade takes place through resource markets. Therefore, there is a "two-way flow" of factor services and money in the top half of the diagram.

The bottom half of the diagram shows how the goods and services produced by business firms are then traded to households for money through what is called the product market. The circular flow diagram, then, shows how production of goods and services takes place, and how these goods and services are traded from business firms to households.

More complicated circular flow diagrams include other sectors of the economy; i.e., financial markets, government, and foreign trade, and show how real and money exchanges among all of these sectors take place.

Readers may use the overlays on pages 128-130 to construct a circular flow diagram for classroom use.

IV. PROGRAM, SUBJECT, AND PUPIL PERFORMANCE OBJECTIVES

Recommended Program Objectives for a K-12 Course of Study in Economics

Upon completion of the twelfth grade students will know, comprehend, apply, analyze, and/or evaluate:

A. how individuals and societies make choices to satisfy wants with limited resources

B. how individuals and households exchange their resources for the income they use to buy goods and services

C. how individuals and business firms use resources to produce goods and services and generate income

D. how societies use forms of money to facilitate economic exchanges

E. how markets allocate goods and services

F. how competition affects markets

G. how local, state, and national governments play important roles in a market economy

H. how an economy functions as a whole

I. how nations with different economic systems specialize and become interdependent through trade

Program Objective A

Upon completion of the twelfth grade, students will know, comprehend, apply, analyze, and/or evaluate how individuals and societies make choices to satisfy wants with limited resources.

Overview

The fundamental economic problem is that people, with virtually unlimited **wants**, live in a world of limited **productive resources.** This is what the term **scarcity** means. Scarcity requires individuals and groups to choose how to best use the resources that are available.

Economic wants are desires which can be satisfied by using **goods or services.** Productive resources are those things or efforts that are required to produce goods or services. They are also referred to as the **factors of production.**

When choices are made concerning how scarce resources will be used, some wants must be foregone. Therefore, choices involve the **trade-off** of economic wants. Individuals who choose one good or service instead of another, or more of one thing and less of another, are making a trade-off. The **opportunity cost** of each choice is the next best alternative. For example, when a person chooses to purchase an apple, the opportunity cost of that choice is the orange, plum, banana, or other good or service that would satisfy the same want. The opportunity cost of a choice is sometimes called its **real cost.**

Just as individuals must make choices which involve trade-offs and opportunity costs, so must societies. The set of rules or norms by which a society organizes its economy defines its **economic system.** Within each economic system, the process by which economic decision-making occurs is important. In the United States, individuals have a great deal of freedom to make decisions. These decisions determine the uses that will be made of the available resources, and which wants will be satisfied.

Program Objective A

Upon completion of the twelfth grade, students will know, comprehend, apply, analyze, and/or evaluate how individuals and societies make choices to satisfy wants with limited resources.

Subject Objectives	**Key Concepts**
1. The student will recognize that all people have **wants.**	Scarcity
2. The student will explain how **factors of production (productive resources)** are used to produce **goods and services.**	Scarcity
3. The student will explain why people's wants are greater than their resources.	Scarcity
4. The student will analyze why **trade-offs** must be made when resources are used.	Opportunity Cost and Trade-offs
5. The student will explain why resource **scarcity** requires individuals, governments, and societies to make economic **choices** to satisfy wants.	Scarcity/Trade-offs
6. The student will explain why, when choices are made for the satisfaction of wants, some wants will be foregone.	Opportunity Cost and and Trade-offs
7. The student will explain how an **economic system** is the framework within which decisions are made by individuals and groups.	Economic Systems
8. The student will explain the importance of making informed personal financial decisions.	Scarcity/Opportunity Cost and Trade-offs

PROGRAM OBJECTIVE A

UPON COMPLETION OF THE TWELFTH GRADE STUDENTS WILL KNOW, COMPREHEND, APPLY, ANALYZE AND/OR EVALUATE HOW INDIVIDUALS AND SOCIETIES MAKE CHOICES TO SATISFY WANTS WITH LIMITED RESOURCES.

SUBJECT OBJECTIVE A-1

The student will recognize that all people have **wants**.

Pupil Performance Objectives

1. The student will define a want(s).
2. The student will identify consumers as people whose wants are satisfied by using goods and services.
3. The student will define a service(s).
4. The student will list services their teacher provides for them, and name other ways that these services might be provided if the teacher did not provide them.
5. Given the definition of wants, the student will list five goods and five services that the individual, household, and community may desire. The student will explain why each may not be able to have all their wants satisfied.
6. The student will compare wants for goods and services among individuals in the classroom.
7. The student will contrast desires for goods and services among individuals in the classroom and explain why there are differences.
8. Given a magazine, the student will select five items they would like, and explain why they want these items.
9. The student will recognize and demonstrate how they consume goods and services in order to satisfy wants.
10. The student will explain how scarce resources are used to produce the goods and services needed to satisfy people's wants.
11. The student will draw a self-portrait and draw pictures of ten items they want around the portrait. Students will compare self-portraits and infer that wants are unlimited and are a matter of personal choice.
12. The student will read the fairy tale, The Three Wishes. Each student will explain the conflict between unlimited wants and limited resources by dramatizing the story.

SUBJECT OBJECTIVE A-2

The student will explain how **factors of production (productive resources)** are used to produce **goods** and **services**.

Pupil Performance Objectives

1. The student will define the term 'factor of production'.
2. The student will list the four factors of production and give an example of each.
3. Given a familiar good (e.g., pizza) or service (e.g., haircut), the student will be able to identify the resources needed to produce the good or service.
4. The student will describe the role of each factor in the process of producing a specific good or service (e.g., pizza or barber).
5. The student will be able to state alternative uses for resources needed to produce a specified good (e.g., pencil) or service (e.g., teacher).
6. Given a specific good (or service), the student will list the factors of production used in producing that item and then list alternative uses for those resources listed.
7. Given a list of goods and services, the student will select items which must be produced with resources.
8. The student will identify examples of decisions that must be made regarding what goods and services will be produced with available resources.
9. Given pictures of various workers in the school, and pictures of the goods or services produced by these workers, the student will identify and match the pictures.
10. The student will describe how we are affected whenever decisions are made by individuals to use resources in the production of a good. The student will identify this choice as the foregone opportunity to use these resources in the production of another good.
11. After creating a large paper doll, the student will list skills and tools used and identify himself as their "own best human (labor) resource."
12. Given a list of items that use the same resources, students will select and consider what goods should be produced if a shortage of one of those resources should occur.

SUBJECT OBJECTIVE A-3

The student will explain why people's wants are greater than their resources.

Pupil Performance Objectives

1. The student will identify five examples of scarcity in the classroom.
2. The student will explain why they cannot have all the toys, clothes, or sports equipment that they want; student explanation is to be stated in terms of scarcity of productive resources necessary to produce these items.
3. The student will describe the relationship between limited resources and unlimited wants for individuals, households, and the community.
4. The student will identify five choices that they have made to satisfy unlimited wants due to limited resources.
5. The student will identify scarcity as the basic economic problem which all societies and people of all ages encounter.
6. The student will determine various allocation methods for a given scarce resource (e.g. individual carton of orange juice) and evaluate the costs and benefits of each method. Students will identify the optimal allocation method for allocating that scarce resource.
7. The student will select a country, study its resources, and produce a list of resources that are unavailable in that country.
8. The student will write about a fantasy society that has unlimited resources to fulfill all its wants, and then generalize about the economic consequences.

SUBJECT OBJECTIVE A-4

The student will analyze why **trade-offs** must be made when resources are used.

Pupil Performance Objectives

1. The student will give five examples of limited resources.
2. The student will define "opportunity cost" and "trade-offs."
3. The student will tell why choice is inevitable when resources have alternative uses.
4. Given a consumer decision (e.g., purchasing a toy), the student will evaluate the costs and benefits of alternative choices.
5. Given a consumption decision, the student will identify the opportunity cost of a personal choice.
6. Given a recess (or free) period, the student will list alternative activities for the period, and identify the opportunity cost of their decision.
7. Given a limited amount of time that can be devoted to learning to play a musical instrument, the student will list alternate uses of that time.
8. Given a decision-making situation, the student will be able to explain why trade-offs among economic goals must be made when resources are used.
9. The student will demonstrate an understanding that trade-offs are generally not "all or nothing" choices and involve getting a little more of one thing in exchange for a little less of another.
10. The student will recognize that in making choices, people should consider the alternatives foregone in order to satisfy the chosen want (opportunity cost).
11. The student will view the Trade-Offs film, "Choice", and identify the opportunity cost of the choices made by the children in the film.
12. The student will create a list of opportunity costs and trade-offs from their own experiences and choices.
13. Given a situation where an economic choice has been made, the student will be able to support or recommend alternative choices that might be made.
14. The student will write an essay telling how the sudden shortage of a given resource will result in trade-offs and opportunity costs.

SUBJECT OBJECTIVE A-5

The student will explain why resource **scarcity** requires individuals, governments, and societies to make economic **choices** to satisfy wants.

Pupil Performance Objectives

1. The student will define scarcity and identify five examples.

2. The student will give examples of goods that can be produced from a natural resource (e.g. wood) and then list some goods that cannot be produced from it.

3. The student will identify situations in which people make choices to satisfy the general wants of the community through government.

4. Given a scarcity of art materials in the classroom, the student will suggest alternatives of how materials can be distributed to complete the projects.

5. Given a list of family vacation options, the student will select one and explain how the decision was made and the opportunity cost of that decision.

6. The student will list the alternative uses of a plot of land donated to the city, decide how the land should be used, explain the choice, and identify the opportunity cost.

7. The student will list government services that families want. The student will then make a list of what they are willing to forego in order to obtain additional government services.

8. The student will brainstorm a list of services the government could provide for people in the community, and explain why all of these services cannot be provided.

9. Given a list of goods and services, the student will distinguish those produced by the private sector (individuals and businesses) and those more economically produced through government.

10. The students will make a mural of goods and services government provides. Each student will explain why these goods and services are not provided by individuals in their community.

SUBJECT OBJECTIVE A-6

The student will explain why, when choices are made for the satisfaction of wants, some wants will be foregone.

Pupil Performance Objectives

1. Given a limited amount of time and money, the student will chose among going to the movies, getting ice cream, or going to an amusement park, and explain why they cannot do the other things.
2. The student will define real cost (opportunity cost) as the next best alternative that is given up when a choice is made.
3. Given a list or "treasure tree" of items, the student will rank the items in order of preference and conclude that the cost of the first is the value of the best alternative foregone (the next best alternative use).

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SUBJECT OBJECTIVE A-7

The student will explain how an **economic system** is the framework within which decisions are made by individuals and groups.

Pupil Performance Objectives

1. The student will define economics.
2. The student will define an economic system.
3. The student will list several individuals and groups who make economic decisions at the local, state and national levels.
4. The student will list examples of how government decisions affect their lives.
5. The student will define a command economy.
6. The student will define a market economy.
7. The student will define a traditional economy.
8. The student will describe how the three economic questions are answered in traditional societies (such as Europe in the Middle Ages, American Indian tribes, or villages in less developed countries).
9. The student will list the three economic questions which any form of economic system must address.
10. The student will describe how the three economic questions are answered in predominantly command economies of the past and present (such as the mercantile nations of Europe or the communist nations of the present time).
11. The student will describe how the three economic questions are answered in a market economy (such as the United States or Canada).
12. The student will identify the U.S. economy as a modified market system.
13. The student will explain why those who own resources which are in greater demand (relative to supply) will have larger incomes than those with resources less in demand.
14. The student will list some traditional and command characteristics of the U.S. economy (such as the goods and services provided by the government).
15. The student will compare and contrast a market economy and a command economy.
16. The student will analyze the importance of tradition in the economies of India, China and Mexico as it has influenced their economic growth.
17. The student will determine that the three economic questions are solved in the market economy by the interaction of producers and consumers in markets.

18. The student will determine that the three economic questions are solved in a command economy by a few individuals who represent a central authority.

19. The student will create a new economy using any combination of those listed and write a story telling how the economy functions.

SUBJECT OBJECTIVE A-8

The student will explain the importance of making informed personal financial decisions.

Pupil Performance Objectives

1. The student will define the term "budget" as a detailed plan of receipts and expenditures.

2. Given a budget the student will create a personal budget identifying choices they have made.

3. Given a $15.00 allotment and food coupons from the newspaper, the student will produce a personal budget by planning lunch menus for a week.

4. The student will discuss why a government must make spending choices, and compare those choices to those that must be made by individuals.

5. The student will list his/her sources of personal income.

6. The student will create a budget for a family of four for one month.

7. Given a sample school budget and a list of alternative school programs, the student will identify the relevant information needed to make sound economic decisions regarding school expenditures.

Program Objective B

Upon completion of the twelfth grade, students will know, comprehend, apply, analyze, and/or evaluate how individuals and households exchange their resources for the income they use to buy goods and services.

Overview

In America, a very **important economic role** is played by the **household** sector. Households are formed not only for social reasons, but also to organize economic decision making. The most common role an individual household member assumes is that of a **consumer. Consumption** means using **income** to obtain goods and services. These goods and services are then used to satisfy wants.

In the American economy, personal economic decisions are often guided by **self-interest**, or the individual benefits of decisions. Informed consumers will consider the **benefits and costs** of each decision. In addition, consumers must also decide when to consume and when to save. Saving is income reserved for future consumption.

The individuals who form the household sector own the factors of production (productive resources). There are four types of factors that are used by **business firms** to produce goods and services. These are **land** (sometimes called **natural resources**), **labor (or human resources)**, **capital** (for example, machinery and tools), and **entrepreneurship.***

When factor owners sell their services to business firms, they receive income in return in the form of **factor payments.** There are four types of payments, one for each of the factors: wages (for labor), rent (for land), interest (for capital), and profit (for entrepreneurship; note that profit may be a negative figure, or a loss). With this income, which is in the form of **money**, individuals trade for the goods and services they want. These goods and services are provided by the same firms who buy the factor services.

People make decisions individually, as part of a household, or as a part of some other group. For example, workers may form **labor organizations** such as unions to make important decisions concerning the use of their labor resources. Business firms may also form groups to make economic decisions in their common interest. Decisions are made to satisfy the interests of individuals or meet the common needs of a group.

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* Some economics textbooks refer to only three factors of production, and consider entrepreneurship to be a form of labor, or even capital. Defining entrepreneurship as a separate factor emphasizes the special role played by business owners as risk-takers. Unlike managers, who receive a stated salary or wage, entrepreneurs receive either profits or losses in exchange for their efforts.

Program Objective B

Upon completion of the twelfth grade, students will know, comprehend, apply, analyze, and/or evaluate how individuals and households exchange their resources for the income they use to buy goods and services.

Subject Objectives	Key Concepts
1. The student will recognize that individuals and **households** consume goods and services to satisfy wants.	Scarcity
2. The student will explain how individuals and households supply the factors of production (productive resources): **land (natural), labor (human), capital, and entrepreneurship.**	Scarcity
3. The student will explain why individuals and households voluntarily exchange productive resources for **income.**	Exchange, Money, and Interdependence
4. The student will explain that individuals and households use income to consume goods and services.	Exchange, Money, and Interdependence
5. The student will analyze how individuals, households, and societies make economic decisions based on their **self-interests** and personal satisfaction.	Economic Institutions and Incentives
6. The student will describe and compare the roles that individuals assume as **consumers** and resource suppliers.	Exchange, Money, and Interdependence
7. The student will explain how the **demand** for resources is derived from the demand for goods and services.	Supply and Demand/Markets and Prices
8. The student will explain the role and impact of **labor organizations in a market economy.**	Economic Institutions and Incentives
9. The student will explain how individual and household decisions have **benefits and costs.**	Opportunity Cost and Trade-offs
10. The student will explain that individuals and households use their incomes to consume or save. Opportunity Cost and Trade-offs	Opportunity Cost and Trade-offs

PROGRAM OBJECTIVE B

UPON COMPLETION OF THE TWELFTH GRADE, STUDENTS WILL KNOW, COMPREHEND, APPLY, ANALYZE, AND/OR EVALUATE HOW INDIVIDUALS AND HOUSEHOLDS EXCHANGE THEIR RESOURCES FOR THE INCOME THEY USE TO BUY GOODS AND SERVICES.

SUBJECT OBJECTIVE B-1

The student will recognize that individuals and **households** consume goods and services to satisfy wants.

Pupil Performance Objectives

1. The student will define goods and services.
2. The student will identify individuals and households as those who consume goods and services.
3. Given pictures of people in the act of consuming goods and services, the student will explain why the people depicted are called consumers and identify the goods and services that are being consumed.
4. The student will make a list of the goods and services their family uses in one week.
5. When given a list of items, the student will classify them as goods or services.
6. The student will interview members in their household and record goods and services consumed for a given period. The student will chart the results and compare their household to other households.
7. The student will list the goods and services they would take along if moving to another planet, and provide a rationale for selecting those items.

SUBJECT OBJECTIVE B-2

The student will explain how individuals and households supply the factors of production (productive resources): **land (natural), labor (human), capital,** and **entrepreneurship**.

Pupil Performance Objectives

1. The student will list the factors of production.
2. The student will recognize that land is owned by individuals and households who supply this resource for the production of goods and services.
3. The student will select an occupation and describe how it contributes toward the production of a good or a service.
4. Given the definition of capital, the student will list several examples and describe how each is used to produce goods and services.
5. The student will give an example of an entrepreneur and describe how they aid in the production of goods and services.
6. The student will demonstrate an understanding of productive resources by drawing pictures of resources necessary to produce a farm good.
7. The student will name the resources used to grow, harvest and sell an apple. The student will classify each resource as land, labor, capital or entrepreneurship.
8. The student will identify resources in household units that are used to produce goods and services.
9. The student will explain how investment in human capital and the division of labor can be used to share household chores.
10. The student will compile a list or a journal consisting of the goods and services produced in their homes (by family members).
11. The student will identify the inputs needed to provide these goods and services in the household and classify them into labor, land, capital and entrepreneurship.
12. The student will list the factors of production that are supplied by their family and the goods and services that result from them.
13. Given a list of specific land, labor and capital resources, the student will act as an entrepreneur to plan the best use of these to produce a good or a service that might be consumed in the marketplace.

SUBJECT OBJECTIVE B-3

The student will explain why individuals and households voluntarily exchange productive resources for income.

Pupil Performance Objectives

1. The student will be able to match each factor of production with the payment received. (e.g. labor--wages and salary, capital--interest).
2. The student will explain why productive resources are exchanged for income.
3. The student will cite specific examples of how a household can earn income by selling labor, by selling or renting a natural resource (such as farmland), by selling or renting capital equipment (such as a snowplow), and by running a business (single proprietorship).
4. The student will state one or more conclusions why money is not often used in the production or consumption of goods and services in the household. (i.e., a household does not contain a "market," but operates using mutual assistances to accomplish a task.)
5. Given a certain fee for raking leaves, the student will determine how many times the task must be performed in order to earn enough money to buy a particular item (e.g., a bike).
6. The student will cite examples of producers and consumers willingly exchanging goods and services for money because of the mutual benefits.
7. The student will explain why money is used in the U.S. economy.
8. The student will comment on why individuals and households want to exchange productive resources for income.
9. The student will write a story about a family that was not interdependent, relying on its own resources to survive.

SUBJECT OBJECTIVE B-4

The student will explain that individuals and households use income to consume goods and services.

Pupil Performance Objectives

1. The student will list items purchased with money that they have earned or received.
2. The student will list items that households use income to purchase.
3. The student will contrast the list of the personal items with the household items .
4. The student will develop a personal budget to record items purchased for a given time period.
5. The student will compare their budget with other students in the class.
6. The student will compare their income and a list of items that they have purchased from kindergarten to the present and identify the changes.

SUBJECT OBJECTIVE B-5

The student will analyze how individuals, households, and societies make economic decisions based on their **self-interests** and personal satisfaction.

Pupil Performance Objectives

1. The student will define opportunity cost.
2. The student will define self interest.
3. Given a list of activities, the student will select those in which they wish to participate within a given period of time.
4. Given the definition of self interest, the student will cite examples of times when they have acted in their own self interest.
5. The student will give examples of why self interest affects economic choices.
6. The student will cite examples of economic incentives that have recently affected their behavior (such as taking a part-time job to get money to buy something they want).
7. The student will select several books from the school library and state their rationale and self interest for the selection of the books.
8. The student will predict ways in which self-interest can produce competition (such as starting a business).

SUBJECT OBJECTIVE B-6

The student will describe and compare the roles that individuals assume as consumers and resource suppliers.

Pupil Performance Objectives

1. The student will describe how their parents act as both consumers and producers.
2. The student will see themselves as consumers. The student will list five products they frequently purchase or their parents purchase for them.
3. Given a list of economic activities generated from student responses, the student will identify and compare the roles of consumers and producers.
4. Students will name at least five goods and services that parents, other family members or neighbors help to produce or provide, and also list several local businesses where these adults frequently buy goods or services.
5. The student will recognize that consumers use and/or purchase goods and services that are produced and deduce that everyone is a consumer.
6. The student will recognize that producers make and/or sell goods and services and deduce that most people are producers.
7. The student will list and illustrate at least five goods consumed in one day and list at least five services used in one week.
8. The student will demonstrate how community members are interrelated in the provision of goods and services for all members of the community (e.g.. plumber supplies plumbing for doctor who supplies health services for farmer who provides food for...).
9. The student will recognize that as producers and consumers, everyone is part of the economic system.

SUBJECT OBJECTIVE B-7

The student will explain how the **demand** for resources is **derived** from the demand for goods and services.

Pupil Performance Objectives

1. The student will define derived demand.
2. The student will list several goods and services and identify the resources necessary for their production.
3. The student will generalize that demanding more goods and services requires the use of more of the resources used to produce those goods and services.
4. The student will cite examples of how the demand for a factor of production is derived from the demand for a good or service.
5. The student will select a good or service that is a current fad and speculate which resources may be in short supply as a result.
6. The student will predict the price of a good or service when demand is more than supply (price goes up).
7. Given a situation where the amount demanded exceeds the amount supplied, the student will predict the effect on the price of a good or service.
8. Given a situation where the amount supplied exceeds the amount demanded, the student will predict the effect on price of a good or service.
9. The student will research a recent fad at a local store to see how a demand for that good has changed over the past year.

SUBJECT OBJECTIVE B-8

The student will explain the role and impact of **labor organizations** in a **market economy**.

Pupil Performance Objectives

1. The student will define labor organization.
2. The student will identify and list three local labor unions.
3. The student will research and describe the functions of a labor organization in or near their community.
4. The student will list the benefits to the worker of membership in a labor organization.
5. The student will identify ways in which labor organizations may affect the cost of goods and services.
6. The student will identify ways in which labor organizations affect the production of goods and services (e.g. safety, quality, job stability, work conditions).
7. Students will debate the following contention of some critics of labor unions: "Union contracts drive up prices, harming workers who don't belong to unions."
8. The student will research a company that has no labor organization and compare it to one that does (e.g. independent grocer vs. chain store).
9. The student will list the costs associated with membership in a labor organization.
10. The student will investigate the reasons for the decline in union membership.

SUBJECT OBJECTIVE B-9

The student will explain how individual and household decisions have **benefits** and **costs**.

Pupil Performance Objectives

1. The student will record individual decisions listing the benefits and costs of each.
2. The student will record household decisions listing the benefits and costs of each.
3. The student will develop a list to compare the costs and benefits of an in school lunch program.
4. The student will demonstrate cost/benefit analysis using a graph. The student will draw a picture of what they would be giving up if they attended school on Saturday and discuss whether the cost (what they are giving up) was worth the benefit (e.g., fun at school).
5. The student will explain that all decisions have some cost and some benefit.

SUBJECT OBJECTIVE B-10

The student will explain that individuals and households use their incomes to consume or save.

Pupil Performance Objectives

1. Students will recognize that they have a choice of saving or consuming their income.
2. The student will compare the benefits and costs of consuming versus saving.
3. The student will generalize that current savings are plans to spend in the future.
4. Since saving allows one to spend in a different time-period students will list things for which they would like to save.
5. The student will identify the opportunity cost of saving in a given situation.
6. The student will compare the savings rates of two countries (e.g. U.S. Ohio and Japan) and hypothesize why they are different.

Program Objective C

Upon completion of the twelfth grade, students will know, comprehend, apply, analyze, and/or evaluate how individuals and business firms use resources to produce goods and services and generate income.

Overview

The right hand side of the **circular flow** diagram in Exhibit 5 (page 14) illustrates the business sector. Business firms combine the land, labor, capital, and entrepreneurship supplied by the household sector, shown on the left hand side of the diagram, to produce goods and services.

It is the interaction of business firms and households through **markets** that determines the answers to the basic **economic questions:** What to produce? How to produce? and For whom to produce (i.e., who should receive the benefits of **production**)? The expectation of profit provides business firms with an **incentive** to produce those goods and services that consumers desire.

Business firms must decide whether to make capital **investments** in order to increase their **productivity.** Productivity is the amount of output produced per unit of input. The goal of firms, as it is for individuals, is to use resources as **efficiently** as possible. An investment in new capital refers to the buying of a new machine, building, or other physical **asset** that adds to a firm's ability to produce output. Firms usually have a number of different investments that could be made, so choices and trade-offs will result. Each choice of investment has an opportunity cost in the form of the next best alternative investment.

Producers must also choose the amount of output that they will produce. Their decisions will be guided by the additional cost (**marginal cost**) **and additional benefit** (**marginal benefit**) that result from producing another unit of output. The benefit that producers receive from producing one more unit of output can be measured by the revenue earned from its sale. If the additional benefit, or revenue, is greater than the additional cost, then it would make sense to increase production. However, if the additional cost is greater than the additional benefit, or revenue, then production should not be increased.

Business firms may be organized in a number of different ways. The most common forms of **business-organization are sole proprietorship, partnership, corporation, and cooperative.** The best form of business organization will be different for different firms. The size of the firm and the type of product it produces are among the factors that determine which form will be chosen.

Program Objective C

Upon completion of the twelfth grade, students will know, comprehend, apply, analyze, and/or evaluate how individuals and business firms use resources to produce goods and services and generate income.

Subject Objectives	**Key Concepts**
1. The student will understand that individuals and **business firms** produce goods and services.	Exchange, Money, and Interdependence/Markets and Prices
2. The student will identify the basic **economic questions.**	Economic Systems/Markets and Prices
3. The student will identify the factors of production (productive resources) used to produce goods and services.	Scarcity
4. The student will explain ways that productive resources can be used **efficiently.**	Productivity
5. The student will evaluate the benefits and costs of an **investment** in capital.	Productivity/Opportunity Cost and Trade-offs
6. The student will explain how trade-offs are involved in decisions to use productive resources.	Opportunity Cost and Trade-offs
7. The student will explain and analyze how decisions to increase production are based on the additional cost **(marginal cost)** and additional benefit **(marginal benefit)** that result from the increase in production.	Economic Institutions and Incentives/Opportunity Cost and Trade-offs
8. The student will identify the payment to each of the factors of production (productive resources).	Income Distribution
9. The student will explain how investment results in the production of new capital.	Productivity
10. The student will explain how **profit is an incentive for entrepreneurs.**	Economic Institutions and Incentives/Income Distribution
11. The student will identify and compare the various forms of **business organization.**	Economic Institutions and Incentives

PROGRAM OBJECTIVE C

UPON COMPLETION OF THE TWELFTH GRADE, STUDENTS WILL KNOW, COMPREHEND, APPLY, ANALYZE, AND/OR EVALUATE HOW INDIVIDUALS AND BUSINESS FIRMS USE RESOURCES TO PRODUCE GOODS AND SERVICES AND GENERATE INCOME

SUBJECT OBJECTIVE C-1

The student will understand that individuals and **business firms** produce goods and services.

Pupil Performance Objectives

1. Using available items in the classroom, the student will produce a good (e.g., book mark, pencil holder) or perform a service for a classmate.
2. The student will find examples of goods and services in magazines or newspapers and identify a business firm that produces it.
3. Given examples of goods, services and producers, the student will match each good/service with the producer.
4. The student will identify a resource (e.g. trees) and describe how it may be used in the making of different products.
5. The student will list several business firms that produce a product that they consume (e.g., soda).
6. The student will list ten producers within the local community and the goods or services they produce.

SUBJECT OBJECTIVE C-2

The student will identify the basic economic questions.

Pupil Performance Objectives

1. The student will define an economic system and list the three questions which an economic system tries to resolve.
2. The student will identify five ways the U.S. government regulates economic activity.
3. The student will give three examples of how limited resources affect the choices made regarding what and how much of each good or service will be supplied by business or the government.
4. The student will identify possible choices an economy may make in determining what to produce, how to produce, and who will receive the benefits of production.
5. The student will describe how a nation's endowment of resources affect how it is able to answer the basic economic questions.

SUBJECT OBJECTIVE C-3

The student will identify the factors of production (productive resources) used to produce goods and services.

Pupil Performance Objectives

1. Given pictures of people from several occupations, the student will name and list the types of skills these people need in order perform their jobs.
2. Given assorted examples of productive resources (e.g., pictures of: trees, tractors, oil drilling rig, scissors, farmer), the student will classify each by factor of production.
3. The student will compile a list of ten natural resources.
4. The student will identify and list ten items in the classroom that are examples of capital goods.
5. Given familiar classroom items, the student will name the resources used to produce them.
6. The student will list all of the resources needed to build a bird house and classify each by factor of production.
7. Given a limited amount of soil (land), the student will identify five alternative uses for the soil, and select the preferred use for the soil.
8. The student will identify ten objects that can be made from trees and create a model (e.g. from clay) showing something that can be made from a tree.
9. The student will give an example of an entrepreneur and identify the role that they play in a market economy.
10. The student will explain why under some conditions it is more efficient to use more labor than capital, and under which conditions that opposite is true.

SUBJECT OBJECTIVE C-4

The student will explain ways that productive resources can be used **efficiently**.

Pupil Performance Objectives

1. The student will define economic efficiency.
2. The student will define specialization.
3. After making a specific product (e.g. envelope or airplane) as a member of a small group, the student will explain why more goods were produced when each member of the group performed a particular task (specialized) in producing the good.
4. Given examples of workers in the community who specialize in the production of a good or service, the student will name goods and services that these individuals consume but do not produce.
5. The student will formulate an assembly line to organize and staple papers. Students will conclude that dividing the tasks of production into specialized tasks or steps increases the amount of goods and services which can be produced in a given amount of time.
6. The student will explain how specialization promotes efficiency.
7. The student will contrast items that a pioneer family member may have produced to goods and service a modern family member might produce.
8. The student will describe the advantages and disadvantages of specialization in the production process.
9. The student will identify individuals in the community that they are dependent on for goods and services.
10. Given two business situations, the student will solve a mathematical problem to determine the output per worker per day in each situation and identify which was more productive.

SUBJECT OBJECTIVE C-5

The student will evaluate the benefits and costs of an **investment** in capital.

Pupil Performance Objectives

1. The student will define capital goods.
2. The student will explain how productivity can be increased by replacing a typewriter with a word processor.
3. The student will explain how increased productivity changes opportunity costs.
4. Given ten pencils, the student will sharpen five pencils manually and five with an electric pencil sharpener. The student will generalize that the electric sharpener is more efficient and more efficient tools increase the productivity of the worker.
5. Given a set of math problems to be completed before recess, one group of students will solve the problems using pencil and paper and one group will solve them using a calculator. Students will evaluate and discuss the factors which increased the rate of productivity.
6. The student will list the benefits and costs of investing in a given capital good and determine whether the investment should be made.
7. The student will define productivity as the output of a particular good or service per unit of input of a productive resource.
8. The student will identify the capital required for the production of a good (e.g., pencil, chair).
9. Given an example of an investment in a capital good (e.g., tractor), the student will identify the possible opportunity cost associated with the choice.
10. Given five occupations, the student will describe how different levels of education and training contribute to the value of the goods or services these workers produce. The student will analyze the effects of health care, or lack of it, on human capital.
11. Given a situation (e.g., a store owner withdraws money from the bank to purchase a computer to increase productivity) the student will explain what trade off was made.

SUBJECT OBJECTIVE C-6

The student will explain how trade-offs are involved in decisions to use productive resources.

Pupil Performance Objectives

1. The student will define opportunity cost and trade-offs.
2. The student will list all resources which are used to produce good "A" and all resources which are used to produce good "B," and then list the resources common to both.
3. The student will identify a trade-off which must be made when a resource is used to produce a good.
4. The student will describe the trade-offs involved when the school orchestra forgoes practice for several weeks in order to enjoy a vacation.
5. The student will list resources needed to produce a specific product (e.g., automobile).
6. The student will list all the products that cannot be made because a resource was used for another purpose.
7. The student will identify two or more goods which require the same resources (e.g., pencils and toothpicks).
8. The student will write a short essay on why an increased production of one good(at full employment) will imply that less of another good is produced.

SUBJECT OBJECTIVE C-7

The student will explain and analyze how decisions to increase production are based on the additional cost (**marginal cost**) and additional benefit (**marginal benefit**) that result from the increase in production.

Pupil Performance Objectives

1. The student will define marginal cost and marginal benefit.
2. The student will analyze the following situation: A teacher decides to change professions. What are the opportunity costs, economic risks and potential benefits of this decision?
3. The student will estimate fixed costs and variable costs of the production of a good (e.g., terrarium).
4. The student will explain why the additional satisfaction associated with an additional unit of a good will eventually decline as they consume the good (e.g., lemonade on a hot day).
5. The student will chose to produce a product (e.g. kites) and calculate the cost of producing the good (including resource, variable and fixed costs). The student will subsequently identify the marginal cost of one more unit of a good being produced.
6. The student will deduce that additional units are produced until the cost of producing an additional unit is greater than the revenue generated from the sale of that item.

SUBJECT OBJECTIVE C-8

The student will identify the payment to each of the factors of production (productive resources).

Pupil Performance Objectives

1. The student will identify themselves as "human resources" and list the jobs for which they receive payments in the form of an allowance.
2. The student will identify the sale of productive resources as a source of income for households with the income of each household determined by the productivity and amount of resources supplied.
3. The student will list the factors of production used in an auto factory and explain how each is paid for.
4. The student will investigate and report various forms of compensation used throughout history (e.g., salt, housing, protection, food, etc.).
5. The student will match the factors of production with the appropriate income received (land--rent, labor--wages and salaries, capital--interest, entrepreneurial skills--profit).
6. Given the appropriate data, the student will point out the income received (in the last available year) according to each factor of production.
7. Given the appropriate historical data, the student will write an essay on how the composition of the income received has changed during this century.

SUBJECT OBJECTIVE C-9

The student will explain how investment results in the production of new capital.

Pupil Performance Objectives

1. The student will give three examples of capital goods in which a business could invest .
2. The student will define physical capital.
3. The student will define human capital.
4. The student will give an example of an investment in human capital.
5. The student will give five reasons why one would chose to make an investment in human capital.
6. The student will explain in terms of human capital why engineers may earn more income than taxi drivers and why teachers with master's degrees may earn more income than teachers without master's degrees.
7. The student will give five reasons why one might make an investment in physical capital.
8. The student will compare human capital with physical capital.
9. The student will state three reasons why some occupations provide higher incomes than others.
10. The student will identify through research current forecasts for business investments for the year. The student will produce a report or analysis of the findings.
11. The student will describe how adding new capital resources can increase productivity and why this is often desirable.

SUBJECT OBJECTIVE C-10

The student will explain how profit is an incentive for entrepreneurs.

Pupil Performance Objectives

1. The student will define profit as the difference between total revenue and total costs.

2. Given a hypothetical mathematical business situation (e.g. Smith's Dairy generated $12,000 in revenues last year, and the costs to maintain the cows were: $2,000 for heat, $3,123 for feed, etc.), the student will calculate the profit or loss.

3. After a classroom visit by a local entrepreneur or following the reading of an entrepreneur's biography (e.g., Steven Wozniak, Ray Kroc, local merchant), the student will write a short essay on the risk entrepreneurs take and the motivation they have in undertaking those risks.

4. The student will define profit as the incentive/payment for the risk the entrepreneur is willing to take.

5. The student will introduce a new good or service (e.g., paper airplane or book mark) into the marketplace (classroom) by creating an idea, experimenting and producing it. The student will conduct a survey to assess the demand for that good or service to determine if it would sell and yield a profit.

6. The student will interview farmers or local businesspersons and tell how the individual determines if their work yielded a profit or loss for their efforts.

SUBJECT OBJECTIVE C-11

The student will identify and compare the various forms of business organization.

Pupil Performance Objectives

1. The student will discuss the difference between the neighborhood police department and a retail establishment in terms of goods and services provided, ownership and the role of profits.
2. The student will compare at least one advantage and one disadvantage of the following business organizations: corporations, partnerships, proprietorships and cooperatives.
3. The student will compare how the ownership of business organizations differ.
4. The student will cite and explain at least four advantages of a corporation, including raising money, limited liability, tax advantages and risk spreading.
5. The student will list at least one example of a corporation, partnership, proprietorship, and cooperative.
6. The student will define collective bargaining as bargaining by a committee/union which represents individuals, in negotiation with an employer to arrive at an agreement regarding wages, hours and other conditions of employment.
7. After reading about conditions of labor and labor unrest during various American historical periods, the student will state reasons for the development of collective bargaining.
8. The student will identify several industries and research whether these industries operate in international, national, regional or local markets.

Program Objective D

Upon completion of the twelfth grade, students will know, comprehend, apply, analyze, and/or evaluate how societies use forms of money to facilitate economic exchanges.

Overview

In the United States economy, most **exchanges** take place in markets where buyers and sellers trade. Money is used in order to make trading easy. In other words, money is used as a **medium of exchange,** or a generally accepted payment for all goods and services. In a **barter system,** money is not used and goods and services are traded directly for one another.

In a barter system, a "double coincidence of wants" must occur for trade to take place. If John Smith wished to trade some of his carrots in a barter system, he would have to find someone else who not only wanted carrots (the first coincidence), but was willing and able to offer John what he wanted in return.

When money is used, each person can trade resources (or the factors of production) for money, as is illustrated in the top portion of the circular flow diagram of Exhibit 5, knowing this money can later be traded for other goods and services. The bottom portion of the circular flow diagram illustrates the exchange of money for goods and services.

A second function of money is as a **store of value.** This means that money can be saved for some future use. A third function of money is as a **unit of account.** This means that prices are stated in terms of money, and can be easily compared.

A more complex circular flow diagram than that found in Exhibit 5 would show how **financial institutions** such as banks, savings and loan associations, credit unions, etc., participate in the economy. They do this by receiving **savings** from some households and business firms and lending to other households and business firms. In this way, the financial institutions help to direct savings to investment and consumption activities.

The **Federal Reserve System** has the primary responsibility for the oversight of the money and banking system of the United States. It distributes currency and coins to banks, provides special services for the federal government, regulates the growth of the money supply, and regulates financial institutions.

Program Objective D

Upon completion of the twelfth grade, students will know, comprehend, apply, analyze, and/or evaluate how societies use forms of money to facilitate economic exchanges.

Subject Objectives	Key Concepts
1. The student will recognize that people willingly **exchange** goods and services in **markets** to satisfy wants	Markets and Price Exchange Money, and Interdependence
2. The student will identify barter as the simplest form of exchange.	Exchange, Money, and Interdependence
3. The student will recognize the role of **money** in an economy.	Exchange, Money, and Interdependence
4. The student will identify the roles of **financial institutions.**	Economic Institutions and Money, Incentives/Exchange, and Interdependence
5. The student will understand the purposes of **savings and credit.**	Economic Institutions and Money, Incentives/Exchange, and Interdependence
6. The student will recognize the role of the **Federal Reserve System** in the United States economy.	Exchange, Money, and Interdependence/ Monetary Policy

PROGRAM OBJECTIVE D

UPON COMPLETION OF THE TWELFTH GRADE, STUDENTS WILL KNOW, COMPREHEND, APPLY, ANALYZE, AND/OR EVALUATE HOW SOCIETIES USE FORMS OF MONEY TO FACILITATE ECONOMIC EXCHANGES.

SUBJECT OBJECTIVE D-1

The student will recognize that people willingly **exchange** goods and services in **markets** to satisfy wants.

Pupil Performance Objectives

1. The student will list items produced by a farmer, butcher, baker, etc.; list items each person wants, and explain how each person can satisfy their wants through exchange.

2. The student will identify ways that people may obtain goods and services which they want but which they do not produce.

3. The student will participate in a simulation or demonstration of voluntary exchange for income.

4. The student will describe how the evolution and use of money helps an economy in overcoming some of the problems associated with the barter system.

5. Given several selected examples, the student will identify situations that illustrate voluntary exchanges (e.g., Bob will give Mary skating lessons if Mary will repair Bob's bike).

6. The student will describe how individuals exchange goods and services through markets to satisfy wants.

SUBJECT OBJECTIVE D-2

The student will identify **barter** as the simplest form of exchange.

Pupil Performance Objectives

1. Given the definition of barter, the student will identify and list situations in which goods and services are exchanged.
2. The student will, with one or more individuals, exchange one good for another.
3. The student will list the pros and cons of a barter system.
4. The student will participate in bartering and compare it with the process of exchange using money.
5. The student will infer that the use of money is more efficient than barter in most societies.
6. The student will view the film, The Kingdom of Mocha. The student will list and analyze the problems encountered through bartering such as divisibility, acceptability, and the ability to carry goods rather than money.

SUBJECT OBJECTIVE D-3

The student will recognize the role of **money** in an economy.

Pupil Performance Objectives

1. The student will sort an assortment of coins and currency according to their value.

2. The student will demonstrate how money facilitates the exchange of goods and services.

3. The student will define money and cite several examples of items used as money.

4. The student will compare and contrast different items that have served as money throughout history.

5. The student will list characteristics of money (i.e., the criteria for "good" money is if the item is divisible, portable, acceptable, and durable) and explain why tomatoes are not acceptable as money.

6. The student will define the three functions of money (i.e. unit of account, store of value, medium of exchange).

7. Given a list of the different forms of money, the student will be able to distinguish between them (i.e., currency, coin, demand deposits, etc.).

8. Given a list of goods and services, the student will describe ways of obtaining these goods and services, and cite the use of money as one means of obtaining each of the items listed.

9. The student will explain that money has value because everyone accepts it in exchange. The student will then give examples of how specific products are valued based upon their money price.

10. The student will construct a graph, or pie chart depicting the percentages of the money supply in coin, currency and demand deposits.

11. The student will explain how money makes it possible for a teacher to get their car repaired, even though they may be unable to find an auto mechanic who wants to go to school.

12. The student will design a currency for classroom use that meets the criteria for acceptable money.

13. The student will select a foreign currency, determine the U.S. exchange, rate and evaluate that currency relative to the criteria for acceptable money.

14. The student will identify the "money" used by a variety of countries.

SUBJECT OBJECTIVE D-4

The student will identify the roles of financial institutions.

Pupil Performance Objectives

1. The student will identify banks, savings and loans, and credit unions as financial institutions which serve consumers.
2. Given the definition of financial institutions, the student will be able to cite examples of each of the major types.
3. The student will explain the role of financial institutions as intermediaries between households and businesses.
4. The student will explain that money borrowed from a bank is the savings of households.
5. The student will illustrate how money flows through economic activity and exchanges.
6. The student will generalize how money is created through bank loans.
7. Given examples, the student will define the role of financial institutions in directing financial capital to business investment and household consumption/borrowing activities.
8. The student will name and describe the types of financial services banks perform, and explain how these services help individuals and businesses.
9. The student will explain why financial institutions are regulated by the government.
10. The student will describe how government influences the economy through the purchase of goods and services.
11. The student will describe how government influences the economy through regulatory activities.
12. The student will describe how government influences the economy through the redistribution of income.
13. The student will describe how government influences the economy through the maintenance of a healthy economy.
14. The student will list the government agencies which regulate financial institutions.
15. From a study of the Great Depression, the student will explain the need for government regulation regarding banking operations.
16. The student will recognize that the government is a consumer of the financial services offered by financial institutions.
17. The student will identify circumstances of government borrowing and describe the effect on the economy.

SUBJECT OBJECTIVE D-5

The student will understand the purposes of **savings** and **credit**.

Pupil Performance Objectives

1. The student will define savings and credit.
2. Given the definition of savings, the student will cite reasons for saving money and list the results of saving.
3. Given the definition of credit, the student will participate in a simulation using plastic cards.
4. Given the definition of credit the student will tell about an experience where borrowing was necessary and discuss the results.
5. Given the definition of credit, the student will borrow coins from the lender (teacher) to purchase pencils at the school supply store. The borrower (student) will sign a promissory note to pay back the loan and interest within a certain period of time. The lender may choose to ask for collateral, an object which may be almost equal in value to the loan.
6. The student will list ways and reasons that individuals and households save their income.
7. The student will infer that people save in order to consume in some future time period (delayed spending).
8. The student will identify reasons why households and businesses may desire to borrow money by taking out a loan (use credit).
9. The student will list reasons why people use credit.(e.g., a) to get something they want now to enjoy but cannot yet pay for, b) for convenience, c) in an emergency, d) to buy costly items, and e) to build credit.)
10. The student will identify the impact of credit on the economy (e.g., increased demand for goods and services leads to businesses' desire to increase production, which leads to economic growth; and income earned from interest on loans by financial institutions is partly used to pay interest on savings).
11. Given a definition of credit, the student will cite several examples of the use and misuse of credit by individuals and society.

SUBJECT OBJECTIVE D-6

The student will recognize the role of the **Federal Reserve System** in the United States economy.

Pupil Performance Objectives

1. The student will explain that the Federal Reserve System is the central banking authority of the U.S.
2. The student will name several functions of the Federal Reserve System.
3. The student will identify the Federal Reserve System as the regulator of the size of the money supply, and explain how it performs that function.
4. The student will identify the Federal Reserve System as the federal agency that controls the nation's money supply and oversees the practices of its member banks.
5. After a study of the Federal Reserve System, the student will be able to describe its structure.
6. After a study of the FED, the student will be able to summarize the major "tools" that the FED uses to control the money supply.
7. After a study of the FED, the student will be able to analyze the reasons for expanding and contracting the supply of money.

Program Objective E

Upon the completion of the twelfth grade, students will know, comprehend, apply, analyze, and/or evaluate how markets allocate goods and services.

Overview

In the United States, economic decisions are made through buying and selling in markets. A market may or may not be located in a specific place. It exists wherever buyers and sellers exchange goods and services. Some markets may be international (for example, the market for gold), while others are located in small towns. The interaction of **supply and demand** for a good or service determines the **price** at which it is exchanged. The price at which the quantity demanded equals the quantity supplied of a good or service is called the **market clearing or equilibrium price.**

The prices of the factors of production, the **state of technology** (that is, the knowledge that producers have of how to combine productive resources) and the number of firms in a market are the main **determinants of supply.** In other words, these factors determine how much of a good or service will be supplied at each price. The main **determinants of demand** for a good or service include the income of consumers, the tastes and **preferences** of consumers, the price(s) of substitute goods, and the price(s) of complementary goods.

In a **market economy,** prices decide which consumers will receive the goods and services that are produced. Those consumers who cannot or are not willing to pay the price will not receive the good or service. Prices provide important information to consumers and business firms. A price tells consumers how much income is needed to buy one unit of a good. As the price of a good rises, the cost of buying it rises. The **law of demand** states that as the price of a good or service rises (falls) the quantity demanded by consumers will fall (rise).

For business firms, an increase in price means an increase in the profit that can be made from producing and selling a good (if prices of resources, like labor, do not change). Therefore, a change in price causes a change in the incentive for business firms to produce. The **law of supply** states that as the price of a good or service rises (falls) the quantity supplied will rise (fall) also.

Program Objective E

Upon completion of the twelfth grade, students will know, comprehend, apply, analyze, and/or evaluate how markets allocate goods and services.

Subject Objectives	Key Concepts
1. The student will explain how resources, goods, and services are exchanged in markets.	Markets and Prices/Supply and Demand
2. The student will recognize the role of consumer **preferences** in markets.	Markets and Prices/Supply and Demand
3. The student will define the factors which determine the demand for goods and services.	Supply and Demand/ Markets and Prices
4. The student will explain how goods and services are supplied in a market.	Supply and Demand/ Markets and Prices
5. The student will recognize the factors that determine the **supply** of goods and services.	Supply and Demand/ Markets and Prices
6. The student will illustrate that the **market clearing (equilibrium) price** is the price at which there is neither a **shortage nor a surplus.**	Supply and Demand
7. The student will explain the **allocative** role of **prices** in markets.	Markets and Prices
8. The student will interpret the interrelationships of markets in an economic system.	Markets and Prices/Supply and Demand
9. The student will explain the relationship between two **substitute goods.**	Supply and Demand
10. The student will explain the relationship between two **complementary goods.**	Supply and Demand

PROGRAM OBJECTIVE E

UPON COMPLETION OF THE TWELFTH GRADE, STUDENTS WILL KNOW, COMPREHEND, APPLY, ANALYZE, AND/OR EVALUATE HOW MARKETS ALLOCATE GOODS AND SERVICES.

SUBJECT OBJECTIVE E-1

The student will explain how resources, goods, and services are exchanged in markets.

Pupil Performance Objectives

1. The student will describe a market as a place where buyers and sellers exchange goods and services.
2. The student will state that goods and services are exchanged through buying and selling, or trading.
3. The student will list five examples of resources, goods, and services exchanged in markets.
4. The student will cite five examples of goods and services that might be exchanged locally, nationally, or internationally.
5. The student will choose a country (other than the U.S.) and report five goods and services that are produced there and exchanged or sold in the U.S.
6. The student will correctly identify the following transaction: if you went to the grocery store and bought two pieces of candy, is that a market?
7. The student will correctly identify the following transaction: if Mrs. Jones bought her son a soft drink at a gas station, is that a market?
8. The student will correctly identify the following: if two farmers sold tomatoes at a roadside stand to a customer, is that a market?
9. The student will correctly identify the following: if you have your teeth cleaned at the dentist, is that a market?
10. The student will identify ten goods or services which the U.S. imports from another country.
11. The student will describe how an increase in income may improve a consumer's ability to participate in the marketplace.
12. The student will describe how an increase in production, lowered production costs and the production of a more highly desired good or service may improve a producer's ability to participate in the marketplace.
13. Given a history of the community, the student will compile a list of goods and services exchanged in the market place, see what changes have occurred over time, and draw conclusions regarding the cause of those changes.

14. Given the labels of five products, the student will identify which ingredients are from another country (international markets).

15. The student will infer that we are dependent on international markets for many of our wants (e.g., chocolate is an ingredient in M & M's , which is not grown in this country).

16. The student will describe how goods and services are exchanged between countries and the role that exchange rates play in the transaction.

SUBJECT OBJECTIVE E-2

The student will recognize the role of consumer **preferences** in markets.

Pupil Performance Objectives

1. Given a list of twenty goods and services, the student will select ten items they would prefer and tell why.
2. Given a list of five goods and services, the student will name three factors which affect their preference for each product.
3. The student will identify consumer preferences (or consumer tastes) as a factor that affects the demand for a product.
4. The student will discuss how the quantity produced of a good or a service is affected by the consumer's desire to purchase it.
5. The student will discuss how consumer preferences influence the quantity produced of a good or service.
6. The student will write a story from the viewpoint of a business owner who has just found out that consumers prefer the competition's product.
7. The student will write a story from the viewpoint of a consumer who has discovered they now prefer compact discs to record albums.

SUBJECT OBJECTIVE E-3

The student will define the factors which determine the demand for goods and services.

Pupil Performance Objectives

1. The student will define demand.
2. The student will list four major determinants of demand (income, consumer taste and preferences, the availability and price of substitutes and compliments, population).
3. The student will give three examples of how various products meet an individual's demand for it.
4. Given the appropriate data, the student will construct a demand schedule for a product.
5. The student will conduct a market survey of demand for a product and will report, illustrate, and compare the results of the survey.
6. The student will compare designer jeans to generic jeans, and list the advantages and disadvantages of each. Students will construct a demand schedule for the product.
7. The student will compare five factors which influence the demand for designer jeans versus generic jeans.
8. The student will state the law of demand.
9. The student will use the results of a market survey to argue the need for a company to increase or decrease the supply of a product.
10. The student will examine generic versus designer products, (e.g., jeans) and will speculate on the differences in demand in the short run and in the long run.

SUBJECT OBJECTIVE E-4

The student will explain how goods and services are supplied in the market.

Pupil Performance Objectives

1. The student will state how price determines which consumers will receive goods and services.

2. The student will define consumer sovereignty.

3. The student will give two examples of products that flourished then disappeared and explain why. The student will evaluate the continued success of the sale of the Hula-Hoop vs. the fade-out (disappearance) of the Pet Rock.

4. From the following list of pairs of items the student will identify which items will have the higher price than the other and will explain why in terms of relative scarcity: diamonds and salt; steak and hamburger; gold and coal.

5. The student will explain how the market price of a good or service affects the quantity a producer will supply.

6. The student will create a product and state what conditions within a specific time period are needed for the product to survive in the marketplace.

7. The student will cite examples of five products that are supplied by local firms.

SUBJECT OBJECTIVE E-5

The student will recognize the factors that determine the **supply** of goods and services.

Pupil Performance Objectives

1. The student will define the law of supply.
2. The student will state two major non-price determinants of supply (i.e., the cost of production, resource prices and technology).
3. Given appropriate data, the student will construct a supply schedule for a product.
4. The student will evaluate the effect on price if there is an increase in the number of producers of compact discs.
5. The student will hypothesize possible outcomes of the following in regard to the production of videotapes. a) cost of production rises or lowers, b) a technological advance, c) availability of resources rises or lowers, d)cost of labor rises or lowers, e)demand rises or lowers).
6. The student will describe how producers of automobile tires will change their production if: technological advance reduces the cost of making tires, the price for rubber or other raw materials goes up; or the price of tractor tires increases sharply.

SUBJECT OBJECTIVE E-6

The student will illustrate that the **market clearing (equilibrium) price** is the price at which there is neither a **shortage** nor a **surplus**.

Pupil Performance Objectives

1. The student will define equilibrium price as the market price at which there is neither a shortage or a surplus and that is market clearing.
2. Given a diagram in which the quantity demanded equals the quantity supplied, the student will determine a market clearing price for radios.
3. The student will draw a graph and illustrate how supply and demand determine market price.
4. The student will explain how the elimination of shortages and surpluses help to determine the market price for apples.
5. Given three distinct items (pair of shoes, pencil, loaf of bread), the student will describe how supply and demand together set the market price of each and how the prices reflect relative scarcity of the items.
6. The student will list the price of any one product and describe how it influences the prices of three other products.
7. The student will draw a graph and indicate a situation in which the quantity supplied is greater than quantity demanded at the given level of price.
8. The student will draw a graph and indicate a situation in which the quantity supplied is less than the quantity demanded at the given level of price.
9. The student will identify a situation in which the price is kept arbitrarily high (above market clearing/a price floor) by a governmental action which may result in a surplus.
10. The student will describe a situation in which the price is kept arbitrarily "too low" by a governmental action which may result in a shortage (price ceiling).
11. The student will determine how the equilibrium price of items is arrived at by participating in an auction.
12. The student will list economic ways of eliminating a shortage (increase price, decrease demand, increase supply).
13. The student will predict what will happen to the market price of Washington apples when a crop disease destroys half of the crop.
14. The student will predict what will happen to the market price when a buyer for a department store greatly over estimates the Christmas demand for microwave ovens.

SUBJECT OBJECTIVE E-7

The student will explain the **allocating** role of **prices** in markets.

Pupil Performance Objectives

1. The student will state that prices are used to determine how productive resources will be distributed and who will be able consume the produced goods and services.
2. The student will state that an equilibrium price allocates resources, goods, and services so that there is no shortage or surplus.
3. Given an example of a product in short supply, the student will conclude how a increase in price will affect the market.
4. Given an example of a product in surplus, the student will conclude how a decrease in price will affect the market.
5. The student will state in terms of supply and demand that prices change because the factors that determine demand, and/or supply, change.
6. The student will define price and will name five items which they would buy listing the price that they would be willing and able to pay for that item.

SUBJECT OBJECTIVE E-8

The student will interpret the interrelationships of markets in an economic system.

Pupil Performance Objectives

1. The student will define opportunity cost and trade offs.
2. The student will give examples of how a given resource can be used in the production of alternative products.
3. The student will conclude that events in one market (e.g., designer blue jeans) will have an effect on other markets (e.g., compact discs. The sudden fad of designer jeans leaves the student with less money to purchase compact discs.)
4. The student will recognize that the demand for napkins, blue jeans, and zippers increases the demand for cotton.
5. The student will predict changes that will occur in a given market as a result of changes in another market. For example, how will the production of zippers be affected if fewer jeans are produced due to an increase in cotton napkin production?
6. The student will predict the expected outcome on the demand for hamburger if the price of steak increases.
7. The student will predict the expected outcome on the demand for french fries if the price of hamburgers decreases.
8. The student will predict the expected outcome on the demand for bicycles if the price of bicycle tires increases.

SUBJECT OBJECTIVE E-9

The student will explain the relationship between two **substitute goods**.

Pupil Performance Objectives

1. The student will define substitute goods.
2. The student will give three examples of how the availability of substitutes affects the demand for a product.
3. The student will describe the market for a product (e.g., pens) and compare it to the availability of similar products.
4. Given a product (e.g., peanut butter), the student will identify several substitutes and analyze the effect on those substitutes with a change in the price of peanut butter.
5. The student will list examples of substitute food goods and prepare a snack using two substitute goods. The student will identify their similarities and differences.

SUBJECT OBJECTIVE E-10

The student will explain the relationship between two **complementary goods**.

Pupil Performance Objectives

1. The student will define complementary goods.
2. The student will give examples of how the availability of complementary products affects the demand for a product.
3. Given the product peanut butter, the student will identify several complementary goods and analyze the effect on those complements with a change in price (increase or decrease) of peanut butter.
4. Given a pair of complementary goods (e.g., cookies and milk), the student will predict the outcome of a change in the price of cookies (increase/decrease), on the demand for milk.
5. Students will give examples of complementary food goods and prepare a snack using two complementary goods. Students will state in their own words why the goods complement one another.
6. The student will list five pairs of complementary goods.

Program Objective F

Upon completion of the twelfth grade, students will know, comprehend, apply, analyze, and/or evaluate how competition affects markets.

Overview

The greater the number of business firms, the greater the amount of **competition** that exists among them. Also, competition among consumers is greater as their numbers increase. The greater the degree of competition, the less each firm or buyer will be able to control price.

The number of business firms that exist in a market will be affected by how much it costs to enter, or start up. When "entry barriers" are high, firms face a high starting cost; this may be due to a high cost for machinery, plant, or some other input. When these costs are low, it is easier for new firms to start up. The size of the market will also affect how many firms there will be in a market. When market size is large, then there is more room for new firms than when the market is small. The lower start-up costs are, and the greater the size of the market, the greater will be the number of firms and the degree of competition.

When only one firm produces a good or service that has no good substitutes, a **monopoly** is said to exist. A monopoly firm can charge higher prices, and produce less output, than it would if faced with competition from other firms. But if a monopoly firm is profitable, other firms will try to compete with it. Entry barriers must be high enough to keep all others out for the firm to remain a monopoly. Common examples of monopoly include many local phone companies and electric utilities.

Competition benefits society because it limits the ability of producers to raise their prices, and provides consumers with a variety of choices. When there is competition, firms that charge high prices will lose business to firms that sell at lower prices. Competition also provides an incentive for firms to produce efficiently; that is, at the lowest cost. Producing at a lower cost will enable firms to make greater profits.

In many industries, firms have some ability to control the prices they charge, but still face some competition from their rivals. Such firms (restaurants, gasoline stations and supermarkets, for example) may compete by charging different prices and offering different services. For example, some firms may attempt to offer better convenience, location or service than their rivals offer. Therefore, firms may compete by charging different prices, or by using **non-price** methods of competition.

Program Objective F

Upon completion of the twelfth grade, students will know, comprehend, apply, analyze, and/or evaluate how competition affects markets.

Subject Objectives	Key Concepts
1. The student will explain that **competition** exists when there are two or more producers (suppliers) of similar products.	Competition and Market Structure
2. The student will identify the factors which determine the degree of competition in a market.	Competition and Market Structure
3. The student will describe and compare the characteristics of markets.	Competition and Market Structure
4. The student will recognize that the price and quantity of each good or service bought and sold are affected by the degree of competition in the market.	Competition and Market Structure
5. The student will recognize the price and **non-price** methods by which business firms compete.	Competition and Market Structure

PROGRAM OBJECTIVE F

UPON COMPLETION OF THE TWELFTH GRADE, STUDENTS WILL KNOW, COMPREHEND, APPLY, ANALYZE, AND/OR EVALUATE HOW COMPETITION AFFECTS MARKETS.

SUBJECT OBJECTIVE F-1

The student will explain that competition exists when there are two or more producers (suppliers) of similar products.

Pupil Performance Objectives

1. The student will identify and define the basic forms of market structures (i.e. pure competition, oligopoly, monopoly and monopolistic competition).

2. The student will identify and list places near their own home where the same goods or services are sold by different suppliers.

3. The student will survey their community to identify and classify businesses (fast-food restaurants, video shops, telephone companies, dentist offices, cable TV company, hardware store, movie theaters, fruit stands, street corner flower vendors etc.). Based on the results of the survey, the student will draw conclusions about which markets are most competitive.

4. The student will list ways in which businesses compete (pricing, advertising, service etc.).

5. The student will predict the probable effect of one major hamburger restaurant in the community reducing its price of hamburgers.

6. The student will create a brand of toothpaste and develop an ad campaign and jingle to promote advertising the product. Students/competitors will vote to select the "best" product.

7. The student will hypothesize how increasing competition forces a business to be more efficient.

8. The student will hypothesize from the above information the effects of competition or lack of competition on price, service, etc.

SUBJECT OBJECTIVE F-2

The student will identify the factors which determine the degree of competition in a market.

Pupil Performance Objectives

1. The student will describe a competitive market as one in which there are many buyers and sellers of the same product.
2. The student will list two factors that would make a market less competitive.
3. The student will identify the advantages and disadvantages of competition in the market place.
4. The student will identify ways in which firms may compete other than reducing price.
5. The student will be given a selling price for paper hats. Given two hats, students will determine how to make their hats more desirable than their competitors.
6. The student will explain how a lack or excess of resources influences the degree of competition in a market.

SUBJECT OBJECTIVE F-3

The student will describe and compare the characteristics of market.

Pupil Performance Objectives

1. The student will identify two examples of monopoly in their community.
2. The student will compare a competitive market with a monopoly market.
3. The student will explain the difference between a monopoly and an oligopoly.
4. The student will list and describe two markets that are not characterized by perfect competition (i.e., oligopoly, monopolistic competition, monopoly).
5. The student will identify a monopoly in their local area and explain why it is a monopoly.
6. The student will deduce what would happen to the price of houses if many people wished to move into the community.

SUBJECT OBJECTIVE F-4

The student will recognize that the price and quantity of each good or service bought and sold are affected by the degree of competition in the market.

Pupil Performance Objectives

1. The student will explain the factors which affect price in a monopoly and competitive markets.
2. The student will explain how competition can lead to lower prices.
3. The student will correctly identify that an INCREASE, not a DECREASE, in competition provides incentive for lower prices and improved goods and services.
4. The student will prepare a short essay as to what is likely to happen to the price of cars if more buyers enter the market.
5. After collecting price data on local fast-food restaurants for similar food items, the student will draw conclusions about the relationship of the number of restaurants to the prices charged.
6. The student will predict the likely economic consequences of the following situation: Suppose there were only three computer manufacturers in the United States, and the sale of all foreign computers was prohibited. If the presidents of these companies were allowed to meet together to plan a business strategy, what are some of the possible effects of such a meeting upon the computer market?
7. Given a list showing the market shares of the top four firms in each of three industries, the student will predict in which industry prices are likely to be highest and output most restricted and explain their answer.
8. The student will distinguish between a cartel (e.g., OPEC--Organization of Petroleum Exporting Countries), in which collusion is legally permitted, and an oligopoly (such as the American automobile industry), in which collusion is legally forbidden.
9. The student will identify the factors which determine the degree of competition in a market.

SUBJECT OBJECTIVE F-5

The student will recognize the price and **non-price** methods by which business firms compete.

Pupil Performance Objectives

1. The student will define non-price competition.
2. The student will list three ways, not including price, in which two ink pen manufacturers could compete with each other.
3. The student will identify several examples of newspaper or magazine advertisements showing competition on non-price features and analyze whether the advertising claims are describing meaningful differences.
4. Discuss the effects of this situation: In order to become a lawyer in any state, a person must pass the bar examination of the state. Suppose your state passes a law allowing only those who score in the top 10 percent of the examination to become lawyers. Would this law restrict competition among lawyers? What are the possible economic effects of a law such as this one? Would there be any benefits to the legislation?
5. The student will illustrate examples of non-price competition in the community.
6. The student will discuss how banks utilize non-price competition by offering "zero" service charge on checking accounts.
7. The student will define product differentiation.

Program Objective G

Upon completion of the twelfth grade, students will know, comprehend, apply, analyze, and/or evaluate how local, state, and national governments play important roles in a market economy.

Overview

The state, local, and federal governments play important roles in the United States economy. Governments purchase goods and services and employ resources in order to provide services to citizens.

The government sector in the United States also affects the economy through **regulation.** Often the purpose of regulation is to achieve social goals such as environmental protection, safety in the workplace, protection of health, and equal opportunity. The responsibilities of the federal, state, and various local governments are sometimes very distinct, but at other times they overlap. For example, education is a responsibility of local governments in Ohio, but schools are regulated and partially supported by the state. Federal funding and regulation also affect the ability of local governments to operate schools. Income redistribution programs are aimed at providing a higher standard of living for low income citizens.

Governments receive their revenue mostly from **taxation.** Some taxes are general, such as an income tax, and are not tied to the expenditure of funds for specific purposes. Other taxes are for specific expenditures. One example is a gasoline tax. The revenue from this tax can be used to build and repair highways.

Program Objective G

Upon completion of the twelfth grade, students will know, comprehend, apply, analyze, and/or evaluate how local, state, and national governments play important roles in a market economy.

Subject Objectives	Key Concepts
1. The student will describe the **economic roles of government in a mixed-market economy.**	The Role of Government
2. The student will define and distinguish between **public and private goods and services.**	The Role of Government/ Market Failures
3. The student will explain that government regulates some economic activities to promote competition, correct **externalities,** and protect consumers.	The Role of Government/ Market Failures
4. The student will explain how governments redistribute income through taxation and **transfer payments.**	Income Distribution/The Role of Government
5. The student will explain how governments attempt to achieve **economic goals.**	The Role of Government/ Monetary Policy/Fiscal
6. The student will identify and analyze the typical roles of local, state, and federal governments in the American economy.	The Role of Government
7. The student will explain the qualities of an efficient system of taxation.	The Role of Government

PROGRAM OBJECTIVE G

UPON COMPLETION OF THE TWELFTH GRADE, STUDENTS WILL KNOW, COMPREHEND, APPLY, ANALYZE, AND/OR EVALUATE HOW LOCAL, STATE, AND NATIONAL GOVERNMENTS PLAY IMPORTANT ROLES IN A MARKET ECONOMY.

SUBJECT OBJECTIVE G-1

The student will describe the **economic roles of government** in a **mixed-market economy.**

Pupil Performance Objectives

1. The student will define mixed-market economy.
2. The student will identify from a list (including both privately and publicly provided goods and services) which goods and services are or may be provided by the government.
3. The student will infer that the government provides the public with more services than goods.
4. The student will identify the economic roles of government as regulation and the provision of public goods and services.
5. The student will identify three characteristics of a mixed economy based on a market, of the traditional and command economies.
6. Given a list of government services provided in different countries the student will decide which services are similar and decide why some services are different.
7. The student will write an essay describing a society in which the government has no impact on the economy.
8. The student will describe the role of the Federal Reserve.
9. The student will cite two examples of governmental decisions that affect the economy.
10. The student will compare the role of government in a mixed-market economy to that of a command economy.
11. The student will identify major services provided by local, state and national government.
12. The student will predict what might happen if there was no legal way to settle boundary disputes.
13. The student will predict what might happen if every state had its own system of weights and measures.

SUBJECT OBJECTIVE G-2

The student will define and distinguish between **public and private goods and services.**

Pupil Performance Objectives

1. The student will define public goods and services and give three examples.
2. The student will define private goods and services and give five examples.
3. The student will compare and contrast four examples of public to private goods and services.
4. The student will explain why the government instead of private industry, usually provides police and fire protection and streets and roads maintenance.
5. The student will define shared consumption and list four examples.
6. The students will grow a garden (public good) in the classroom and identify the responsibilities and benefits as belonging to all class members.
7. The student will list five privately owned goods which they have paid for directly.
8. The student will identify our economic system as a mixed market system because we produce a combination of private and public goods and services.
9. The student will explain why shared consumption of private goods is not feasible.

SUBJECT OBJECTIVE G-3

The student will explain that government regulates some economic activities to promote competition, correct **externalities**, and protect consumers.

Pupil Performance Objectives

1. The student will cite four examples of government regulations that enhance competition.
2. The student will define externalities (spillover costs and spillover benefits).
3. The student will identify examples of positive and negative externalities.
4. The student will cite three examples of government regulation that protect citizens from negative externalities (e.g.,. pollution).
5. The student will list four consumer protection agencies and list their functions.
6. The student will identify the functions of various consumer protection agencies within the government (local, state, and national).
7. The student will find three examples of how negative externalities can be corrected.
8. The student will explain how externalities can affect decisions about whether the private or public sector should provide goods and services.
9. The student will recognize that when the cost of education is borne by the community through taxes, all citizens benefit because the effects on the children improve the quality of life for all residents.

SUBJECT OBJECTIVE G-4

The student will explain how governments redistribute income through taxation and **transfer payments**.

Pupil Performance Objectives

1. The student will define tax.
2. The student will identify taxes as a source of government revenue as a payment for public goods and services.
3. The student will list ten goods and services that are supplied by government through tax revenues.
4. The student will define transfer payments and give examples.
5. The student will identify ways that transfer payments benefit some families while costing others as taxes.
6. The student will apply their knowledge of the role of government in the economy in responding to the following question: Your community needs a new fire station. Who will pay for this building and how will they get the money?
7. The student will deduce that tax cuts have the potential to expand economic activity and tax increases have the potential to contract economic activity.
8. The student will identify the criteria of a good "tax"(i.e. easy method of payment, fair, collects enough revenue to finance project) and give an example.
9. The student will define taxation as the major sources of income for government which government must have if it is to purchase goods and resources in the marketplace.
10. The student will list and give examples of the kinds of taxes used in the U.S.
11. The student will list several forms of transfer payments and give the source of their revenues.
12. The student will explain why government payments are made to people who have lost their jobs.
13. The student will differentiate among the following examples and non examples of transfer payments: government employee retirement benefits; wages for work in a local supermarket; commission for selling a house; unemployment compensation.

SUBJECT OBJECTIVE G-5

The student will explain how governments attempt to achieve economic goals.

Pupil Performance Objectives

1. The student will define the primary economic goals of the U.S. government as price stability, economic growth and maximum employment.
2. The student will define price stability and understand why it is better to have stable prices.
3. The student will write an essay exploring the problems when prices are not stable.
4. The student will define economic growth and why it is important if an economy is to grow.
5. The student will write an essay exploring the problems when economic growth is not stable.
6. The student will compare the common economic goals of governments at the local, state, and national levels.
7. The student will define fiscal policy as the use of taxes and government spending to achieve economic goals.
8. The student will conduct research to determine the economic goals and activity of their city or country for the past ten years. The student will develop a time line which shows the results.
9. The student will define monetary policy as the control of interest rates and the buying and selling of government bonds to affect the money supply.
10. The student will state the relationship between economic growth and the standard of living.
11. The student will make a list of possible outcomes of inefficient uses of productive resources.

SUBJECT OBJECTIVE G-6

The student will identify and analyze the typical roles of local, state, and federal governments in the American economy.

Pupil Performance Objectives

1. The student will describe how the Federal Reserve can increase or decrease the money supply.
2. The student will give two reasons why the government would want to protect the authenticity of money (counterfeiting).
3. The student will identify the policies of the State of Ohio that promote economic growth. Teacher might request information from Ohio Department of Commerce (e.g., Buy Ohio program).
4. The student will choose an example of a recent state economic policy and analyze its effectiveness (e.g., Ohio Housing Bond Money, legislation, school funding).
5. The student will describe methods used by local governments to attract business to nearby locations.
6. The student will recognize that government is often in competition for borrowing funds from financial institutions.
7. The student will identify ways the local, state and federal governments provide services, regulate economic activity, spend revenues, and tax.

SUBJECT OBJECTIVE G-7

The student will explain the qualities of an efficient system of taxation.

Pupil Performance Objectives

1. The student will explain the difference between the terms budget deficit and the national debt.

2. The student will define an efficient system of taxation as a system that is easily managed (administratively manageable), easily collected from taxpayers (payer efficient), and generates sufficient revenues as needed (economically efficient).

3. The student will list the three types of taxes (progressive, regressive and proportional) and cite two examples of each.

4. The student will use a problem-solving model to evaluate the fairness of each type of tax.

5. The student will create and label a pie graph indicating the efficiency of various taxes. The student will estimate, using percentages, how much each type of tax contributes to government revenue.

6. The student will recognize that government regulation involves trade-offs among social goals.

7. The student will state that to be efficient, a tax should neither discourage production nor change the allocation of resources.

8. Given a list of different taxes in the economy, the student will classify these by type (progressive, regressive or proportional).

Program Objective H

Upon completion of the twelfth grade, students will know, comprehend, apply, analyze, and/or evaluate how an economy functions as a whole.

Overview

The study of the functioning of an entire economy is called **macroeconomics.** The flow of economic activity that occurs in an economy, as illustrated by the circular flow of economic activity, can be measured over a period of time. The best measure of this flow is the **gross domestic product** (GDP). GDP measures the market, or dollar, value of the output of final goods and services produced in a given period of time.

Final goods and services are those that are sold to the ultimate consumers. For example, bread sold to a consumer would be a final good, but the wheat sold to a baker to make the bread would not be a final good. Real GDP, or GDP adjusted for price level changes **(inflation or deflation),** is the best tool for measuring **economic growth.**

GDP will not grow at a constant, or predictable, rate. However, GDP does exhibit a pattern of growth over time that is described by the **business cycle.** A business cycle consists of a period of positive growth of real GDP **(expansion)** which is followed by a period of negative growth **(recession).** During the business cycle, the economy experiences changes in the **unemployment rate,** the rate of inflation, interest rates, and other variables.

The most popular, but not the only, measure of inflation is the **consumer price index** (CPI). The CPI measures the change in the dollar cost of a group of goods and services that the typical household buys. The economy experiences inflation when the **aggregate demand** (total demand, or spending on final goods and services by all sectors of the economy) is greater than the **aggregate supply** (total amount produced) of final goods and services in a given time period. In a period of inflation, the purchasing power of each dollar falls.

When aggregate demand falls, total spending and the level of economic activity fall. Since the **Great Depression,** the federal government has assumed an active role in influencing the growth of the macro economy. In its attempts to "smooth out" business cycle movements, the federal government may use **fiscal policy,** or changes in government spending and taxation. Tax rate cuts or increases in government spending tend to increase economic activity, while tax rate increases and spending cuts tend to have the opposite effect.

The Federal Reserve System, established in 1913 as the **central bank** of the United States, is responsible for **monetary policy.** This refers to changes in the rate of growth of the money supply in order to influence spending. The Federal Reserve can slow economic activity by reducing the rate of growth of the money supply, and can spur the growth of economic activity by increasing the growth rate of money.

Program Objective H

Upon completion of the twelfth grade, students will know, comprehend, apply, analyze, and/or evaluate how an economy functions as a whole.

Subject Objectives	Key Concepts
1. The student will describe how the **circular flow model** represents interrelationships among households, business firms, and markets.	Markets and Prices
2. The student will identify the factors which determine an economy's **production possibilities.**	Scarcity/Productivity
3. The student will identify factors which determine **aggregate demand.**	Aggregate Demand
4. The student will identify factors which determine **aggregate supply.**	Aggregate Supply
5. The student will describe a **business cycle.**	Gross Domestic Product/ Unemployment
6. The student will explain and evaluate the effects of **inflation** in an economy.	Inflation
7. The student will explain and evaluate the effects of **unemployment** in an economy.	Unemployment
8. The student will identify the role of a **central bank** in an economy.	Exchange, Money, and Interdependence/Monetary Policy
9. The student will identify how fiscal policies may affect the level of output and income in an economy.	Fiscal Policy/The Role of Government

PROGRAM OBJECTIVE H

UPON COMPLETION OF THE TWELFTH GRADE, STUDENTS WILL KNOW, COMPREHEND, APPLY, ANALYZE, AND/OR EVALUATE HOW AN ECONOMY FUNCTIONS AS A WHOLE.

SUBJECT OBJECTIVE H-1

The student will describe how the **circular flow model** represents interrelationships among households, business firms, and markets.

Pupil Performance Objectives

1. The student will describe a circular flow model and how it is a representation of a market system.
2. The student will draw a representation of the circular flow of income and label the markets, sectors and flows.
3. The student will list and describe the component parts of the circular flow model.
4. The student will match each factor of production with the factor payment received.
5. The student will illustrate how resources, production and money move through the circular flow model.
6. Given a circular flow of income model, the student will identify the real flow of production and resources.
7. Given the circular flow of income model, the student will identify the role of markets in facilitating the exchange of goods and services.
8. Given the circular flow of income model, the student will identify how government and financial institutions interact with households and businesses.

SUBJECT OBJECTIVE H-2

The student will identify the factors which determine an economy's **production possibilities**.

Pupil Performance Objectives

1. The student will list the types of resources (i.e. land, labor, capital and entrepreneur skills) which determine the economy's production possibilities.
2. The student will define the terms scarcity, opportunity cost, and trade-offs.
3. Given a familiar situation, the student will explain why the production of more of one good will result in the production of less of another good.
4. Given a specific resource, the student will list alternative goods which can be produced with the resource.
5. The student will list seven examples of technological progress.
6. The student will describe how a technological advance enhances an economy's choices.
7. The student will describe how an investment in human capital (e.g. education, immunizations, no charge breakfasts), will affect an economy's production capabilities over time.
8. The student will show how changes in technology offer more choices from the same resources.
9. The student will describe the production choices that had to be made regarding the allocation of steel during World War II (e.g., steel was provided to the military in greater quantities than for consumer products), and explain why the choices were made.
10. The student will identify time as a scarce resource. Given a decision-making situation, the student will make a choice whether to take a swimming lesson to prepare for an upcoming swim meet, or visit a friend.
11. The student will predict what might happen if a technological breakthrough allowed for the use of non-toxic chemicals as an inexpensive source of electric power.

SUBJECT OBJECTIVE H-3

The student will identify factors which determine **aggregate demand**.

Pupil Performance Objectives

1. The student will define macroeconomics.
2. The student will define Gross Domestic Product (GDP).
3. The student will list five ways the government can influence the total demand in the economy.
4. The student will list four ways businesses can influence the total demand in the economy for goods and services.
5. Given a circular flow model, the student will identify how government and households interact.
6. Given a circular flow model, the student will identify how government and businesses interact.
7. The student will list the institutions which directly influence the total demand in the economy.
8. The student will define aggregate demand.
9. The student will list four factors that affect aggregate demand.
10. The student will analyze and demonstrate graphically the change in aggregate demand brought about by each of the following events: (1) an increase in governmental spending, (2) increased exports of U.S. made automobiles to Japan, (3) a decrease in the personal income tax, and (4) a decrease in consumer savings.

SUBJECT OBJECTIVE H-4

The student will identify factors which determine **aggregate supply**.

Pupil Performance Objectives

1. The student will define aggregate supply.
2. The student will list four examples of technological progress.
3. The student will describe how technological progress affects the total supply of goods and services in the economy.
4. The student will describe why an increase in productive capacity often requires an opportunity cost of current consumption.
5. The student will analyze and demonstrate graphically the change in aggregate supply brought about by each of the following events: (1) new sources of easily recovered petroleum are found within the continental United States, (2) the expanded use of computers leads to greater output per worker in many industries, (3) government increases corporate income taxes, and (4) consumer spending on goods and services appears to be diminishing.

SUBJECT OBJECTIVE H-5

The student will describe a **business cycle**.

Pupil Performance Objectives

1. The student will define "business cycle"
2. The student will list the four basic stages of the business cycle (expansion, peak, contraction and trough).
3. Given a graphical representation of changes in the level of growth/economic activity, the student will discern the stages of the business cycle.
4. The student will discuss three reasons why some businesses may do well in some time periods and not so well in other time periods.
5. The student will define expansion and contraction of the business cycle.
6. Given a specific business, the student will list economic conditions that will enhance the firm's activities.
7. Given a specific business, the student will list economic conditions that will depress the firm's activities.
8. The student will list which economic variables change during a recession and in which direction. (unemployment, prices, etc.).
9. The student will list five economic variables which change during an expansion and in which direction (productivity, prices, etc.).
10. The student will describe the role of the entrepreneur in economic growth.

SUBJECT OBJECTIVE H-6

The student will explain and evaluate the effects of inflation in an economy.

Pupil Performance Objectives

1. The student will define price index, nominal prices, real prices and inflation.
2. The student will be able to calculate a price index.
3. The student will select a market basket index of goods they are interested in and construct a price index for those goods.
4. Given a price index, the student will be able to interpret it.
5. The student will discuss the effects of inflation on consumer buying habits.
6. The student will list those groups in society that may benefit during a period of unanticipated inflation.
7. The student will list those groups in society that may be hurt during a period of unanticipated inflation.
8. Given a series of price index numbers over time, the student will be able to identify the periods of inflation, deflation and relative price stability.
9. Given data on the Consumer Price Index over a specific period of time, the student will identify periods of inflation, deflation and relative price stability.
10. The student will describe how business decisions are affected by inflation.
11. The student will define cost-push inflation and demand-pull inflation.
12. The student will describe why and how price expectations may influence the rate of inflation or consumer behavior.
13. The student will write a letter to a government official (e.g., Department of Education, Department of Tourism) to inquire about the current rate of inflation and the effect on their decision making.
14. The student will write a composition expressing their interpretation of inflation and formulate a possible solution.

SUBJECT OBJECTIVE H-7

The student will explain and evaluate the effects of **unemployment** in an economy.

Pupil Performance Objectives

1. The student will identify the decade of The Great Depression.
2. The student will define unemployment rate and labor force.
3. The student will explain what happens to employment during the phases of the business cycle.
4. The student will identify the opportunity costs to society of unemployment.
5. Given the appropriate data, the student will calculate an unemployment rate.
6. Given the appropriate data, the student will identify how different groups in society(as differentiated by race, age, sex) differ by unemployment rates.
7. The student will be able to list different reasons (general economic conditions) why different people may be unemployed.
8. The student will participate in a panel discussion (dialogue) to discuss how their family and the economy are affected by unemployment.
9. The student will list the criteria of the definition of the labor force.
10. The student will describe the types of unemployment.
11. The student will list five socio-economic consequences of unemployment.
12. The student will differentiate between cyclical, frictional and structural employment.
13. The student will apply the definition of an unemployed person in explaining why a retired person is not considered unemployed.
14. The student will explain why an unemployed person is likely to have less spending power than a person who holds a job.
15. The student will identify which of the following are considered to be in the labor force: an elementary student with a paper route, an army captain, a retired butcher, an insurance salesman, and a woman with children who does not wish to work.

SUBJECT OBJECTIVE H-8

The student will identify the role of a **central bank** in an economy.

Pupil Performance Objectives

1. The student will be able to describe the historical factors which influenced the formation of the Federal Reserve System.
2. The student will identify the Federal Reserve as the institution responsible for monetary policy and banking regulation.
3. The student will list the major components of the basic money supply (coins & currency, demand deposits, and time deposits).
4. The student will list the general ways in which financial institutions can influence the money supply.
5. The student will describe how a change in the growth rate of the money supply influences total spending in the economy.
6. The student will list the major monetary tools of the Federal Reserve.
7. The student will describe why checkable deposits are considered money.
8. The student will describe why time deposits are not always considered money.
9. The student will assess how prices are affected when the money supply is increased or decreased.
10. The student will identify conditions under which the Federal Reserve may choose to take monetary control actions.
11. The student will explain the chain reaction, or ripple effect, of monetary policy.
12. The student will sequentially list the steps a check goes through from the time it is written until it is returned, canceled, to the owner.
13. The student will analyze how a change in the money supply may expand or contract an economy.

SUBJECT OBJECTIVE H-9

The student will identify how fiscal policies may affect the level of output and income in an economy.

Pupil Performance Objectives

1. The student will list fiscal policy measures the federal government can use to influence the level of aggregate demand.
2. The student will be able to identify a particular policy action as either monetary policy or fiscal policy.
3. The student will compare and contrast monetary policy actions and fiscal policy actions used to influence the level of aggregate demand.
4. The student will list the general tools the government can use fiscal policy to relieve unemployment or recession.
5. The student will define fiscal policies as the use of government spending or taxation to influence the level of economic activity.

Program Objective I

Upon completion of the twelfth grade students, will know, comprehend, apply, analyze, and/or evaluate how nations with different economic systems specialize and become interdependent through trade.

Overview

The United States has become increasingly dependent on other nations to provide the goods and services it consumes, and to buy the goods and services it produces. This **interdependence** is the result of **specialization** by people and nations in the production of those products which they produce best.

Goods and services produced in one country that are sold to another country are called **exports.** Goods and services bought from foreign producers are **imports.** Producers (individuals or nations) will benefit most from trade by producing those things that they can produce at a lower (opportunity) cost than other producers. An individual or nation is said to have a **comparative advantage** in the production of a good or service when its cost of production is less than that of its trading partner's.

When a nation follows a **free trade** policy, it places no restrictions on import or export trade. Although total output of goods and services would be greatest if all nations followed a free trade policy, some individual industries and workers would be harmed. This is one reason why a completely free trade policy is rarely pursued by any nation.

Nations have different levels of economic development. While some are highly industrialized with high levels of income, others have relatively low levels of income. The best tool for comparing the relative levels of economic development of nations is per capita Gross Domestic product. This is equal to GDP per person.

Nations choose different economic systems. The United States has primarily a market system, while other nations, for example the Soviet Union, choose **central planning (or a command economy)** as their model. Very poor nations **often rely on tradition** to organize their economies. In reality, all nations of the world exhibit characteristics of each of the three economic systems. This is why the United States is said to have a **mixed-market economy.**

Program Objective I

Upon completion of the twelfth grade, students will know, comprehend, apply, analyze, and/or evaluate how nations with different economic systems specialize and become interdependent through trade.

	Subject Objectives	Key Concepts
1.	The student will explain that **interdependence** occurs when two or more persons, regions, or nations **specialize** and exchange goods and services to satisfy their wants.	Exchange, Money, and Interdependence
2.	The student will recognize that the world's productive resources are unequally distributed among nations.	Absolute and Comparative Advantage and Barriers to Trade
3.	The student will explain how nations use their **comparative advantages** to produce goods and services for trade with other nations.	Absolute and Comparative Advantage and Barriers to Trade
4.	The student will explain how **international trade** is the result of specialization and interdependence among nations.	Exchange, Money, and Interdependence Absolute and Comparative Advantage and Barriers to Trade
5.	The student will understand that **imports and exports** are goods and services exchanged between nations.	Absolute and Comparative Advantage and Barriers to Trade
6.	The student will explain the significance of a nation's **balance of trade.**	Absolute and Comparative Advantage and Barriers to Trade
7.	The student will explain and evaluate the arguments for and against free trade between nations.	Absolute and Comparative Advantage and Barriers to Trade
8.	The student will explain the characteristics of the basic types of economic systems.	Economic Systems
9.	The student will explain the factors which affect the economic development of nations.	International Aspects of Growth and Stability

PROGRAM OBJECTIVE I

UPON COMPLETION OF THE TWELFTH GRADE, STUDENTS WILL KNOW, COMPREHEND, APPLY, ANALYZE, AN/OR EVALUATE HOW NATIONS WITH DIFFERENT ECONOMIC SYSTEMS SPECIALIZE AND BECOME INTERDEPENDENT THROUGH TRADE.

SUBJECT OBJECTIVE I-1

The student will explain that **interdependence** occurs when two or more persons, regions, or nations **specialize** and exchange goods and services to satisfy their wants.

Pupil Performance Objectives

1. The student will define specialization, interdependence, exchange, and barter.
2. The student will infer that people exchange goods and services to satisfy wants.
3. The student will state the pros and cons of a barter system.
4. The student will describe how the use of money facilitates exchange within a country.
5. The student will list seven examples of goods or services that are traded between countries.
6. The student will describe why trade between countries is more complicated than trade within a single country.
7. The student will give five examples of how they are dependent upon other people, regions and nations, and how the other nations are dependent on us (interdependence).
8. The student will list five products produced in Ohio and sold in other states or nations.
9. The student will list five products imported from other nations to Ohio.
10. The students will identify conditions that encourage a state or region to specialize in the production of a product or service.
11. The student will give examples of situations where an individual or country may not wish to be interdependent (oil, national defense, food etc.).
12. The student will predict the effect of a country depleting its resources (How will dependent countries respond?)
13. The student will list five products they use that are produced in another country.
14. The student will explain that in an economy based on exchange and specialization, industries and firms are dependent upon one another to produce goods and services.

15. The student will explain that consumer decisions about purchases of goods and services affect a chain of producers and other consumers.

16. The student will describe how specialization leads to interdependence.

SUBJECT OBJECTIVE I-2

The student will recognize that the world's productive resources are unequally distributed among nations.

Pupil Performance Objectives

1. Given a product map of the world, the student will identify five nations with which we trade.

2. Given a resource map of the world the student will pick a natural resource and describe how it is unevenly distributed around the world.

3. The student will describe why an uneven distribution of resources creates the need for trade around the world, giving rise to differences in opportunity costs.

4. The student will identify and illustrate resources in which the U.S. has an absolute advantage.

5. The student will list resources that the U.S. is not endowed with or has in very small quantities relative to our needs.

STUDENT OBJECTIVE I-3

The student will explain how nations use their **comparative advantage** to produce goods and services for trade with other nations.

Pupil Performance Objectives

1. The student will be able to define absolute advantage and comparative advantage.
2. The student will explain the role of uneven resource endowments in determining absolute advantage.
3. The student will determine which country has the absolute advantage in the production of a good.
4. The student will determine which country has the comparative advantage in the production of a good.
5. The student will calculate the opportunity cost of producing a product for each of two countries and determine which country has the comparative advantage in the production of that product.
6. The student will define specialization as it is used in economics.
7. The student will explain why Ohio does not produce oranges and Florida does.
8. The student will explain why European countries and the United States buy oil from the Middle East countries rather than producing it all themselves.

STUDENT OBJECTIVE I-4

The student will explain how **international trade** is the result of specialization and interdependence among nations.

Pupil Performance Objectives

1. The student will identify two examples of everyday apparel imported from other nations and write a paragraph explaining how their lives would change if we did not trade with foreign countries.

2. The student will participate in a simulation of an international exchange. Students will prepare an international dish to trade and discuss the advantages of the trade.

3. The student will list five resources from other countries upon which the U.S. is dependent.

4. The student will predict the result of a given country's inability to provide the U.S. with certain goods and/or services.

5. The student will follow the path of a foreign good from its production to its final consumption in the U.S.

6. The student will explain how international trade allows for a more efficient use of world productive resources and increases world production.

7. The student will describe why trade between countries is more complicated than trade within a country.

8. The student will list three barriers to trade between countries.

9. The student will be able to write an essay on who "gains" and who "loses" when a barrier to trade is imposed.

10. The student will explain how the production of Japanese cars in Ohio has changed the automobile trade.

11. The student will explain why there is a foreign exchange market and give examples of the need for foreign exchange.

12. The student will calculate the following using current exchange rates:
    a) How much would the student pay for an $8.10 U.S. record in England?
    b) How much in U.S. dollars is $15 dollars Canadian?
    c) An Italian sweater sells for 27,000 Lira. How much in U.S. dollars?

13. The student will analyze the following example: In a given year the American dollar equaled 250 Japanese Yen; in the following year, the American dollar equaled 150 Yen, in the third year, it equaled 200 Yen. A camera costs 75,000 Yen and a radio costs 25,000 Yen. What was the price in American dollars of these two items each year, and will Americans want to buy more or less in year one, two or three? Why?

STUDENT OBJECTIVE I-5

The student will understand that **imports** and **exports** are goods and services exchanged between nations.

Pupil Performance Objectives

1. The student will define exports and imports.
2. Given the necessary data, the student will identify the volume of world trade involving the United States and list the U.S 's major imports and exports.
3. Given the necessary data the student will list the five most important (in dollar terms), goods which the U. S. exports to other countries.
4. Given the necessary data the student will list the five most important (in dollar terms), goods which the U. S. imports from other countries.
5. The student will identify a country and goods and services which they would like to import and export from that country. The student will compare the goods and services imported versus those exported.
6. The student will speculate on why a country would want to export more than they import.
7. The student will write an essay showing the stages of production, export, and consumption of a U.S. good.
8. The student will identify five products that are exported from Ohio, and five that are imported to Ohio.

STUDENT OBJECTIVE I-6

The student will explain the significance of a nation's **balance of trade**.

Pupil Performance Objectives

1. The student will define balance of trade.
2. Given trade figures for a country, the students will identify a balance of trade deficit or a balance of trade surplus.
3. Given the necessary data, the student will list the five most important (in dollar terms), countries with which the United States has a balance of trade surplus and those we have a balance of trade deficit.
4. Given trade figures for the U. S. since World War II, the student will write an essay on how the balance of trade has changed for the U. S. over time.
5. The student will describe how an unfavorable balance of trade (deficit) affects a nation's domestic economy.

STUDENT OBJECTIVE I-7

The student will explain and evaluate the arguments for and against free trade between nations.

Pupil Performance Objectives

1. The student will define tariff and quota.
2. The student will describe the differences between tariffs and quotas.
3. The student will list the ways nations can restrict trade.
4. The student will write an essay on the barriers to trade between nations which were enacted during the Great Depression.
5. The student will write and essay on who "gains" and who "loses" when a trade barrier (tariff or quota) is imposed.
6. The student will list and discuss the economic arguments in favor of protective trade barriers.
7. The student will describe how other nations might retaliate in reaction to trade barriers erected by the U. S..
8. The student will write an essay in support of free trade.
9. The student will write an essay in support of protective tariffs and quotas.

STUDENT OBJECTIVE I-8

The student will explain the characteristics of the basic types of economic systems.

Pupil Performance Objectives

1. The student will describe the basic differences between a centrally-planned economy and a market economy.
2. The student will write an essay on how decisions are made in a mixed-market economy.
3. The student will describe the basic economic questions that are common to all economic systems.
4. Given the necessary data the student will compare the rates of economic growth between five countries.
5. The student will write a story suggesting what life in a different economic system might be like.
6. The student will describe the characteristics of traditional economies.
7. The student will compare the ways traditional, market and centrally planned economies answer the basic economic questions.

STUDENT OBJECTIVE I-9

The student will explain the factors which affect the economic development of nations.

Pupil Performance Objectives

1. The student will define real Gross Domestic Product (GDP) as a measure of economic growth.
2. The student will explain why less-developed countries tend to have less capital investment.
3. The student will explain how the choice of economic systems may influence economic development.
4. The student will explain how literacy levels and life expectancy are related to a nation's level of economic development.
5. The student will explain how economic development is influenced by the relative availability of factors of production.
6. The student will define economic growth and give examples of countries experiencing economic growth.
7. The student will analyze data on real GDP per capita for each of the following countries and draw conclusions pertaining to each country's level of economic development: China, India, Mexico, Canada, Japan, and the U.S.
8. The student will define economic growth and give examples of countries experiencing economic growth.
9. The student will analyze data on real GDP per capita for each of the following countries and draw conclusions pertaining to each country's level of economic development: China, India, Mexico, Canada, Japan, U.S.A.

V. PUPIL EVALUATION POLICY

Rationale

Evaluation of student learning in economics, as in any other curriculum area, is a necessary dimension of the teaching process, if only to assign student grades. But the teacher can obtain much more useful information than simple grade distributions through the practice of planned evaluation of economics objectives. Teachers can build into their normal classroom activities evaluations which will provide them with valuable information about what works and what does not as they teach economics. For instance, the teacher can study student performance on a pre-instruction examination to determine how much students already know about the economics unit about to be taught. By analyzing class knowledge of individual economic concepts, one can determine where more or less teaching emphasis should be placed in order to allocate the teacher's time most efficiently. It makes little sense to spend the same amount of time or teaching effort on all economic concepts or topics if students demonstrate good pre-instruction understanding of some concepts, but weak understanding of others.

Or, as teachers proceed through an extended unit on economics, they may wish to examine student understanding of the various economics objectives covered in order to obtain formative evaluation information. This kind of mid-unit "feedback" enables the teacher to revise and modify the instructional unit to strengthen areas of relatively weak student understanding or to review with the class particular economic topics or concepts with which most students appear to have difficulty.

Finally, at the end of a unit of economics instruction, teachers need to establish individual student grades or performance assessments for reporting purposes. At this point teachers may want to know how the class as a whole did, so that they can have confidence in their methods, materials, and teaching strategies. This kind of summative evaluation is very important in the improvement of teaching strategies, materials, and methods over time. It also allows the teacher to make sound decisions about the economics curriculum prior to the next class or unit in economics. When post-instruction student performance is compared to pre-instruction results, the teacher is in a position to make sound judgments about the teaching/learning process just completed.

Suggested Techniques

Teachers who wish to evaluate student economic understanding may use a number of approaches, including normed and standardized tests, teacher-made tests, subjective assessments through individual observation, or the analysis of essays or other written assignments. The use of normed and standardized achievement tests provides the best externally validated assessment method for most economics teaching situations. Such nationally normed test instruments are valid and reliable measures of student knowledge, and the tests have published national norms which may provide a useful objective standard of performance. The tests also have known characteristics which are usually described in the test manual. By administering and scoring these tests according to the test manual's instructions, the teacher obtains valuable objective information about student and class performance which is difficult to challenge.

The use of teacher-made objective tests is also possible, and may give the teacher some of the desired information about student understanding of economics objectives. But the process of constructing valid and reliable tests from scratch is difficult and time-consuming for the individual teacher. Moreover, the teacher-made test lacks any external norms to which the class can be compared. The same is also true of essay examinations or the evaluation of other types of student projects or written assignments.

Teachers may also want to evaluate student growth in the affective domain, not just the cognitive domain. Affective learning is more difficult to assess, but may be just as important to student progress. Student affect can be objectively measured (for instance, by using the **Survey on Economic Attitudes**), particularly at grades 7-8 and above. Such affective assessments can measure how students feel about the subject of economics as well as certain economic issues or problems. It should be stressed, however, that affective tests do not have "right" and "wrong" answers, as is the case with objective cognitive tests.

Testing Techniques

A recommendation to teachers implementing this **K-12 Model Course of Study in Economics** is that they try to measure student economic understanding on both pre- and post instruction bases. Another recommendation is that teachers should use, whenever they are available, nationally normed, standardized tests of economics achievement. This avoids the extra work needed to construct an individual test, which is unlikely to have the high reliability and validity of national tests. A standard of comparison will also be unavailable for teacher-made tests.

A third recommendation is that test results should be scored and then an item analysis should be computed. An item analysis allows the teacher to determine which economics concepts or topics are understood, and which are not. It is computed simply by looking at each question on a standardized test, and counting the number (or percentage) of students who chose the correct response (and how many chose each of the incorrect answers). The resulting "P-value" (percentage correct) for each question on the test can be compared with the overall average for the test to see which questions had above-average (and below average) class performance levels. The item analysis for a particular class may also be compared to the item analysis for national tests by looking in the test manual for the appropriate form of the test used. For an overall discussion of evaluation approaches in economic education, see (Soper, J. C., "Needs for Evaluation in Economic Education," in **Perspectives on Economic Education**, 1977).

Testing Resources

For teachers of students in grades 7 and 8, a new test is now available from the National Council on Economic Education (either directly from the NCEE or from your area's Center for Economic Education): the Test of Economic Knowledge (TEK). This new cognitive achievement test has two equivalent forms, A and B, each containing thirty-nine items. The content categories for the TEK are based on the Joint Council's Framework . The TEK was nationally normed in 1987, using a sample of over 6,800 students in grades 8 and 9, some of whom had economics instruction and some of whom had none. A comprehensive **Examiner's Manual** is also available for this test, providing detailed information on the structure of the test, instructions for use, and national normed data (including item analyses).

Also available for testing grade 8 students, particularly for those who have viewed the Give & Take video/film series, is the Test on Give & Take, available from the NCEE. This test draws its content specifications from the Give & Take video/film series produced for the NCEE by the Agency for Instructional Technology (see Give & Take, 1982). The test has one form with thirty-six items, and a comprehensive **Examiner's Manual** is available. Separate norms were produced for grades 8, 9, and 10.

For teachers of students in grades 4, 5, and 6, the National Council on Economic Education has **published the Basic Economics Test (BET), a nationally** normed test produced in 1981. The BET has two equivalent forms, A and B, each having thirty-eight questions. **The content** categories for the BET items are based on the National Council's Framework. A **comprehensive Examiner's Manual** is available, with separate norms for grades 4, 5, and 6.

At the second and third grade levels, the only economics test currently available is the **Primary Test of Economic Understanding** (PTEU), now out of print at the NCEE. This test was developed in 1971 at The University of Iowa, and is badly in need of replacement. Most Ohio Centers for Economic Education can supply copies of the PTEU if teachers and/or schools desire them. Norms for the PTEU were obtained in 1971 by administering the test to over 4,400 third graders around the country. The test has sixty-four true-false items which must be read to the students. The first thirty-two items are paired with items thirty-three through sixty-four, and students must get both items in each pair correct in order to get one point. The maximum score is thus thirty-two.

At the time the K-12 MCSE was written, the National Council was examining the possibility of developing a new test, the **Primary Economics Test** (PET), for use with second and third graders. Educators who are interested in this project should contact the NCEE's Director of Research at 432 Park Avenue South, New York, NY 10016, (212) 685-5499.

Finally, one affective domain instrument, the **Survey on Economic Attitudes** is available, at least for TWELFTH grade students. The **Survey on Economic Attitudes** (SEA) has two subscales of fourteen items each: the "Attitude Towards Economics" (ATE) and the "Economic Attitude Sophistication" (EAS) sub-scales. The ATE scale measures student attitudes towards economics as a subject or course of study, while the EAS measures the sophistication of student attitudes toward a number of major economic problems or issues. National norms have been produced for the SEA for grades 8, 9, 11, and 12 (see Soper and Walstad, 1983).

Close attention to the planned evaluation of economics objectives by teachers, curriculum specialists, and other educators will greatly strengthen the implementation of the K-12 MCSE and will improve economic understanding among Ohio school students. It will also help the classroom teacher in his or her daily educational work. Many tools are readily at hand to assist with this task, and teachers are encouraged to contact their area's Center for Economic Education or the Ohio Council on Economic Education for advice and assistance.

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GLOSSARY OF ECONOMIC TERMS

Absolute Advantage: * As a result of the uneven distribution of resources around the world, one country will have an ability to produce a good or service by using smaller amounts of resources than can another country. For example, Country A will have an absolute advantage over Country B in the production of paper clips if it uses fewer amounts of resources to produce the same number of paper clips.

Aggregate Demand: The total demand for final goods and services in any period by all sectors of the economy, including household, business, government, and foreign trade.

Aggregate Supply: The total supply of final goods and services which are produced in an economy in a period of time.

Allocation: The process of selecting one use for a resource, or for an amount of income, rather than an alternative use.

Asset: A physical property or a right that is owned.

Balance of Trade: The difference between the value of one country's exports and its imports, in a given time period.

Barter: The trade of one good or service for another good or service without the use of money.

Benefit/Cost Analysis: The process of comparing the benefits and costs of an activity.

Business Cycle: The upward and downward movement of overall economic activity over a period of years. Each cycle has four phases: a period of sustained increase in economic activity (expansion), a peak (the end of the expansion), a period of decline in economic activity (recession), and the end of the decline in economic activity (trough).

Business Firms: Privately owned, profit-oriented organizations engaged in the buying and hiring of resources and in the production of goods and services.

Business Organization: A business firm may be legally organized as a proprietorship, partnership, corporation, or cooperative.

*Note: All terms that appear in section IV in boldface are defined in the glossary. Additional terms that do not appear in boldface in section IV are included in the glossary. Each of these is indicated by an asterisk.

Capital: Productive resources made by past human efforts. These resources are used to produce other goods and services.

Cartel: * A group of firms in the same industry that join together to control the price, production, and sale of a product or products in the hope of enjoying the advantages of monopoly.

Central Bank: A financial institution with the legal authority to regulate the growth of a nation' s money supply, and to perform other regulatory duties. It is sometimes referred to as a "banker's bank" because it provides services primarily to commercial banks and other financial institutions, rather than to members of the public. The Federal Reserve System acts as the central bank of the United States.

Centrally Planned Economy: An economic system within which decisions are made largely by an authority, such as a monarch or government planning agency. Also referred to as a command economy.

Checkable Deposits: * Funds deposited in checking and other similar accounts. Checkable deposits include demand deposits (funds in checking accounts), certain money market mutual funds, credit union share drafts, and others. Checkable deposits are part of the money supply of the United States.

Choice Making (Consumer): The process by which consumers make economic decisions, including which goods and services to obtain. Choices must be made because consumers have unlimited wants for goods and services, but limited resources (income and time).

Choice Making (Producer): The process by which producers make economic decisions including which goods and services to produce, and which investments to make. Choices must be made because the resources that are used in production (land, labor, capital, and entrepreneurship) are limited.

Circular Flow of Economic Activity/Circular Flow Model: A diagram that shows the flow of economic activity between the household and business sectors of a market economy. The interaction between these sectors takes place through the exchange of "real items" (productive resources, goods and services) for money. More complex circular flow diagrams include other sectors of the economy (government, financial intermediaries, and foreign trade).

Command Economy: (See Centrally Planned Economy)

Comparative Advantage: Exists between two individuals (or regions or nations) when each has a different opportunity cost for producing the same good or service. Each individual (or region or nation) will have a comparative advantage in that product for which it has a lower opportunity cost.

Competition: Rivalry among sellers (firms) and buyers (consumers) in a market economy. The greater the degree of competition, the less each seller or buyer is able to control price.

Complementary Goods: Two or more goods that are typically used jointly by consumers (for example, peanut butter and jelly). As more of one good is bought, more of the complementary good is bought as well.

Consumer: A person who uses goods and services to satisfy wants.

Consumer Price Index (CPI): A number used to measure the change in the dollar cost of a fixed "market basket" of goods and services bought by an average urban family. The CPI can be used to compare the cost of the "market basket" in one time period to what it cost in another time period.

Consumption: Expenditures by households and individuals on goods and services. May also refer to the use of such goods and services.

Cooperative: A type of business organization formed, owned, and operated by individuals, or other organizations, for their mutual benefit.

Corporation: A type of business organization that has legal status as a fictional "person" distinct from its owners (stockholders) and managers.

Credit: The ability to borrow money by taking out a loan. Repayment of the loan will include the amount borrowed and interest charges.

Cyclical Unemployment: * (See Unemployment, Cyclical).

Deflation: A decrease in the general price level.

Demand: The amount of a good or service that buyers are willing and able to purchase at various prices in a given time period.

Demand Deposits: * Funds deposited with a financial institution that can be withdrawn without delay ("on demand") by the depositor. Funds are typically withdrawn by writing a check.

Derived Demand: The demand for a resource which results from the demand for the goods and services produced with that resource. For example, the demand for labor is derived from the demand for the goods and services produced with that labor.

Determinants of Demand: Those factors, other than the price of a good or service, which influence how much consumers will buy. Among these are the consumer's tastes and preferences, the consumer's income, and prices of substitute and complementary goods. Changes in any of these will cause changes in demand.

Determinants of Supply: Those factors, other than the price of a good or service, which influence how much output producers will provide. Among these are the number of producers of the product, the prices of the factors of production, and the state of technology.

Discount Rate: * The interest rate charged by Federal Reserve Banks on reserves lent to financial institutions. Changes in the discount rate are sometimes used by the Federal Reserve System to help control the growth of the money supply.

Division of Labor: * The separation of the total work required to produce a good or service into individual interrelated tasks, so that each worker can become more skilled at a particular job. The use of a division of labor results in increased efficiency and productivity.

Economics: * The study of how society uses its scarce resources to satisfy the unlimited desires of its citizens for goods and services.

Economic Efficiency: The production of a given amount of goods and services at the lowest cost, or the production of the most output for a given cost.

Economic Equity: * One of the economic goals of a society. Economic equity is justice or fairness with respect to how resources and income are allocated.

Economic Freedom: * Freedom of consumers, workers, and producers to make choices in the marketplace in their own self-interest.

Economic Goals: The objectives that a society attempts to achieve as it uses its economic system to allocate resources. Different societies may choose different goals. In the United States, economic goals may include efficiency, equity, freedom, and growth.

Economic Growth/Decline: The increase or decrease in the total production of goods and services in a country over time.

Economic Incentives: Rewards (often monetary) for greater effort, efficiency, or innovation.

Economic Questions: Three basic questions that must be answered by all societies: What to produce? How to produce? For whom to produce?

Economic Roles: individuals and households play two basic roles in an economic system: one as suppliers of productive resources, and another as consumers. The economic role of business firms is to combine productive resources in order to provide consumers with the goods and services they want.

Economic Roles of Government: Federal, state, and local governments may participate in an economic system in a number of ways. These include the provision of public goods, correction of negative externalities, redistribution of income, and regulation of economic activities.

Economic Security: * Protection against various economic risks over which people have little or no control. For example, unemployment, bank failures, and poverty in old age.

Economic System: The method of organization by which a society chooses to answer the basic economic questions: what to produce, how to produce, and for whom to produce. The major types of economic systems are: tradition, command, market, mixed-market.

Efficiency: (See Economic Efficiency)

Employment Rate: * The percent of the entire non institutionalized population age sixteen or over that is employed, either full-time or part-time, in the United States.

Entrepreneur: A profit-seeking decision-maker who decides which economic activities to undertake and how they should be undertaken. A successful entrepreneur will make a profit, while an unsuccessful entrepreneur will make a loss.

Entrepreneurship: The term used to describe the factor of production, or productive resource, supplied by the entrepreneur.

Equilibrium Price: The price at which the amount that producers are willing and able to sell (quantity supplied) is equal to the amount that consumers are willing and able to buy (quantity demanded); the price at which neither a surplus nor a shortage exists. Also known as the "market clearing price."

Exchange or Trade: The act of exchanging one good (or service, or resource) for another, either directly (barter) or indirectly (by using money).

Expansion: The phase of a business cycle during which there is a sustained increase in economic activity.

Exports: Goods and services produced in one country that are sold to citizens of another country. One country's exports are another country's imports.

Externalities: The positive or negative effects that result when the production or consumption of a good or service affects the welfare of people who are not directly involved in a market exchange.

Factor Payments: Direct payments for factors of production. These payments include wages (for labor), rent (for land), interest (for capital), and profit or loss (for entrepreneurship).

Factors of Production: The resources used to produce goods and services. These are: (1) land (including raw materials); (2) labor (all human resources); (3) capital (tools, machines, buildings, vehicles etc.); (4) entrepreneurship (risk-taking).

Federal Reserve System: The central banking system of the United States. Its primary functions are to regulate the growth of the money supply, to implement certain regulatory policies, and to lend money to banks and other financial institutions.

Financial Institutions or Intermediaries: Organizations such as banks, savings and loans, and insurance companies, which provide a means for channeling saving into borrowing and provide personal banking services.

Firms: (See Business Firms).

Fiscal Policy: The use of government spending and taxing powers to promote macroeconomic goals.

Forms of Competition: * Methods by which firms compete, either through price or nonprice methods. Non-price methods include advertising, location, and service.

Free Trade: The policy of having no restrictions over imports or exports.

Frictional Unemployment: * (See Unemployment, Frictional)

Full Employment: * The level of employment that results when all members of the labor force who wish to work are employed, except for those who experience structural or frictional unemployment.

Great Depression: The name given to the decline in economic activity (recession) that occurred from 1929 to 1933 in the United States. This term has been used in reference to this period because of the unusual severity of the decline; for example, the unemployment rate in the United States exceeded 20 percent during this period.

Gross Domestic Product (GDP): The total market value of a nation's production of final goods and services in a given period, usually one year. A final good or service is one which is sold to the ultimate consumer.

Good: Any object that is capable of satisfying a human want.

Government Regulation: The rules or laws of a federal, state, or local government that restrict business and/or individual activity. Examples of governmental economic regulation include approval of the sale of new drugs, environmental protection, and approval of utility rate changes.

Households: Those who provide the factors of production to business firms and buy goods and services.

Human Resources: (See Labor).

Imports: Goods and services produced in one country that are purchased by citizens of another country or countries.

Incentive: (See Economic Incentives).

Income: Payments received by households, businesses, and governments in a given time period that may be spent or saved.

Inflation: An upward movement in the general level of prices which results in a reduction in the amount of goods and services that can be purchased with a given amount of money.

Interdependence: The reliance of one or more individuals upon others to obtain goods and services that they do not provide for themselves. Interdependence is a result of specialization.

Interest: Payment for the use of capital or saving.

International Trade: Exchange of goods, services, and resources between residents of different nations.

Investment: Increases in the economy's productive capacity through the addition of more and/or better resources.

Labor: A productive resource that consists of the talents and skills of human beings that contribute to the production of goods and services.

Labor Organization: An organization of workers formed in order to represent the interests of its members.

Labor Force: * The total noninstitutionalized population, sixteen years and older, who are employed or actively looking for work.

Land (Natural Resources): Productive resources which are gifts of nature. Examples include water, iron ore, trees, and petroleum.

Law of Demand: As the price of a good or service declines, the amount that consumers are willing and able to buy at each price increases. As the price rises, the amount that consumers are willing and able to buy at each price decreases.

Law of Supply: As the price of a good or service rises, the amount that suppliers are willing and able to offer at each price increases. As the price declines, the amount that suppliers are willing and able to offer at each price decreases.

Macroeconomics: The study of the functioning of the economy as a whole. Macroeconomics focuses on such topics as changes in total output and income, employment and unemployment, and movements in the price level.

Marginal Cost: At any given point of production, the change in total cost due to a change in output by one unit.

Marginal Benefit (Utility): The amount of satisfaction a consumer receives from consuming an additional unit of a good or service.

Marginal: * The term used to describe the effects of a change in a given situation. A synonym for marginal is additional.

Market: A term used to represent the interaction of the buyers and sellers of a particular good or service. A market need not be located in a single place as long as an exchange of information about prices and quantities bought and sold exists.

Market Clearing Price: (See Equilibrium Price.)

Market Economy/System: An economic system that has the following characteristics: private ownership of goods and the factors of production, freedom of individuals to make economic choices, the use of prices to allocate resources, and a limited economic role for government.

Market Interaction: * The interrelationships among changes in supply and demand in the markets for resources, goods, and services. Changes that occur in one market have important and often unforeseen effects in other markets.

Market Structure: * Refers to the characteristics that determine the degree of competition in a market or industry. These characteristics include the number of firms in the market, how costly it is for new firms to enter the market, and the degree of product differentiation. There are four main types of market structure: (1) pure competition, (2) monopolistic competition, (3) monopoly and (4) oligopoly.

Medium of Exchange: One of the functions of money whereby it is generally accepted in exchange for goods and services.

Microeconomics: * The study of the behavior of individual households, firms, and markets Microeconomics concerns such topics as how prices and outputs are determined in markets and how the price mechanism allocates resources and distributes income.

Mixed-Market Economy/System: An economic system that contains elements of a market economy, along with elements of a command and/or tradition economy. The United States is considered to have a mixed-market economy.

Monetary Policy: The regulation of the growth of the money supply in order to achieve macroeconomic goals. In the United States monetary policy is conducted by the Federal Reserve System (also called the Fed). The three main monetary policy tools that the Federal Reserve System may use are changes in required reserve ratios (used infrequently), changes in the discount rate, and open market operations.

Money: Anything that is generally accepted in exchange (payment) for goods and services (e.g., coins, paper bills, checks). Money is also used as a unit of account (prices are stated in terms of money) and a store of value (money is an asset that people can hold, or save).

Monopoly: A type of market structure in which one firm sells a product for which there are no close substitutes. Example: an electric utility may be the only supplier of electricity in a local area. Even though some substitutes exist for electricity, such as battery or solar power, these would probably not be considered close substitutes. If entry into the monopolist's market is very costly, the monopoly may persist over time, even if the profits received by the monopolist are high.

Monopolistic Competition: * A type of market structure. Its characteristics include: each firm in the market has a small degree of control over the price its charges for its output; there is easy entry into the market by new firms; firms can differentiate their outputs and engage in non-price competition.

Natural Resource: (See Land.)

Non-exclusion: * A characteristic of a public good. Once the public good is provided, no one can be excluded from using it (e.g., national defense).

Non-price Competition: Competition among producers through methods other than price. Examples include differences in product quality, service, advertising, and packaging.

Oligopoly: * A type of market structure in which there are only a small number of firms Each firm has a significant amount of control over the price of its product. Other characteristics include: firms may sell either similar or identical products; there is a high cost of entry into the market by new firms; changes in price and output by one firm affect rival firms.

Open Market Operations: * The buying and selling of securities by the Federal Reserve System in order to affect the rate of growth of the money supply. Buying securities will tend to cause the rate of growth of the money supply to increase, and selling securities will tend to make the growth of the money supply decrease. The most important tool of monetary policy.

Opportunity Cost: The value of the next best alternative when an economic choice is made.

Partnership: A form of business organization whereby a firm is owned by two or more people who make all business decisions, share profits, and bear responsibility for any losses.

Preferences: A person's likes/dislikes for different goods and services.

Price: The amount of money needed to buy one unit of a good or service. In an economy where money is used, prices are expressed in terms of money.

Price Stability: * The absence of fluctuation (inflation or deflation) in the general price level.

Private Goods and Services: Goods and services that are purchased by households and used to benefit only themselves.

Product Differentiation: * Attempts by producers to convince consumers that their products are better than those of rival producers. These attempts may include differences (alleged or real) in product quality and better service, among others.

Production: The act of combining land, labor, capital, and entrepreneurship to make goods and services.

Production Possibilities: The alternative output combinations that a nation can produce, in a given time period, with a given amount of resources and with a given state of technology. A production possibilities curve illustrates production possibilities for two products in the form of a graph.

Productivity: The average output produced per unit of input during a given time period. This is commonly measured in terms of output per hour worked.

Productive Resources: (See Factors of Production.)

Profit: The total revenue received by a business firm minus its total cost of production.

Profit Motive: * The incentive that profit provides to people. It causes entrepreneurs to take risks in order to combine resources to produce and sell goods and services.

Proprietorship: A form of business organization whereby a firm is owned by a single person, who makes all business decisions, receives profits, and bears responsibility for any losses. Also referred to as sole proprietorship.

Public Goods and Services: Goods and services used by a society as a whole. No one within the society may be excluded from enjoying their benefits.

Pure Competition: * A type of market structure. Its characteristics include: each firm's output is such a small part of the total that it has no control overprice (each firm is a "price taker"); the output sold by each firm in the market is exactly the same (there is no product differentiation); firms may easily enter into, or exit from, the market; no non-price competition.

Quota: * As it applies to international trade, a quota is a limit placed on the quantity that may be imported into, or exported out of, a country.

Real Cost: (See Opportunity Cost).

Recession: A downturn in overall economic activity characterized by rising unemployment and declining real GDP (GDP adjusted for price level changes), generally for two or more quarters.

Rent: Payment for the use of land (natural resources).

Regulation: (See Government Regulation).

Required Reserves: * The minimum amount of reserves that a financial institution (commercial bank, savings and loan, etc.) is required to keep, in the form of either vault cash or deposits with a Federal Reserve Bank. The Federal Reserve is responsible for setting "required reserve ratios", which determine the amount of a financial institution's required reserves as a percentage of its deposits.

Resources: (See Factors of Production).

Saving: The amount of income that is not spent. People save in order to consume in some future time period.

Savings: The total accumulated saving of a person or group of people at any given time.

Scarcity: The lack of sufficient resources to produce all the goods and services that people desire.

Self-Interest: A concern for one's own well-being and for the satisfaction of one's own individual wants. Self-interest need not mean selfishness.

Service: An economic activity that satisfies a consumer's wants. Not a tangible commodity.

Shared Consumption: * A characteristic of a public good that is consumed by more than one person at the same time (e.g., national defense, or police protection).

Shortage: A condition that exists when the amount of a good or service that consumers are willing and able to purchase is more than what businesses offer to sell at the existing price. An increase in price would eliminate the shortage.

Specialization: When a resource owner produces a narrower range of goods and services than the resource owner consumes.

State of Technology: The technical skills and know-how that a nation possesses at any one time that can be applied to production of goods and services. A given state of technology determines how much output can be produced with a given amount of resources.

Store of Value: One of the functions of money. Money can be saved for future use, rather than spent.

Structural Unemployment: * (See Unemployment, Structural).

Substitute Goods: Products that are related so that an increase in the price of one will cause an increase in the demand for the other. For example, butter may be a substitute for margarine.

Supply: The amounts of a good or service that firms are willing and able to provide at various prices in a given time period.

Surplus: A condition that exists when the amount of a good or service consumers are willing and able to purchase is less than what businesses offer to sell at the existing price. A decrease in price would eliminate the surplus.

Tariff: * A tax (or customs duty) imposed by a government on an imported or exported product.

Tax: A compulsory payment to a government. The activities of governments in the United States are chiefly financed by taxes, especially by taxes on personal and corporate incomes.

Trade-off: The sacrifice of one option for another. The use of a scarce resource, good, or service in a particular way involves a trade-off of some other resource, good, or service.

Tradition (Traditional Economy): An economic system within which decisions are based on customs, beliefs, religion, habit, etc. Such a system is generally characterized by simple production methods and limited exchange.

Transfer Payment(s): Income received by individuals for which no productive effort is required during the period in which payment is received. Examples include unemployment compensation, social security benefits, and Aid to Families with Dependent Children (AFDC).

Unemployment, Cyclical: * Unemployment that results when the economy experiences a recession and there is a reduction in the overall demand for labor, which accompanies falling production.

Unemployment, Frictional: * Unemployment caused by constant changes in the economy that prevent qualified workers from immediately finding job openings. People usually spend time searching for appropriate jobs, and while this search takes place they are frictionally unemployed.

Unemployment, Structural: * Unemployment that results when changes in the economy eliminate some jobs without generating new jobs that can be filled by unemployed workers.

Unemployment rate: The number of people who are unemployed as a percentage of the labor force.

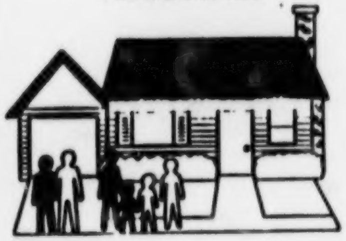
Unit of Account: One of the functions of money. Prices are stated in terms of money, rather than in terms of goods. The price of milk is stated in terms of dollars and cents (e.g., $1.50 per gallon) rather than in terms of bread (e.g., three loaves per gallon).

Wages: Payment for individuals who render labor services.

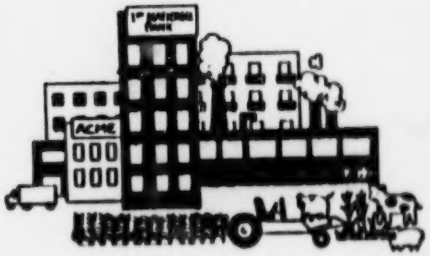
Want: A psychological or physical desire that may be fulfilled through the consumption of goods and services.

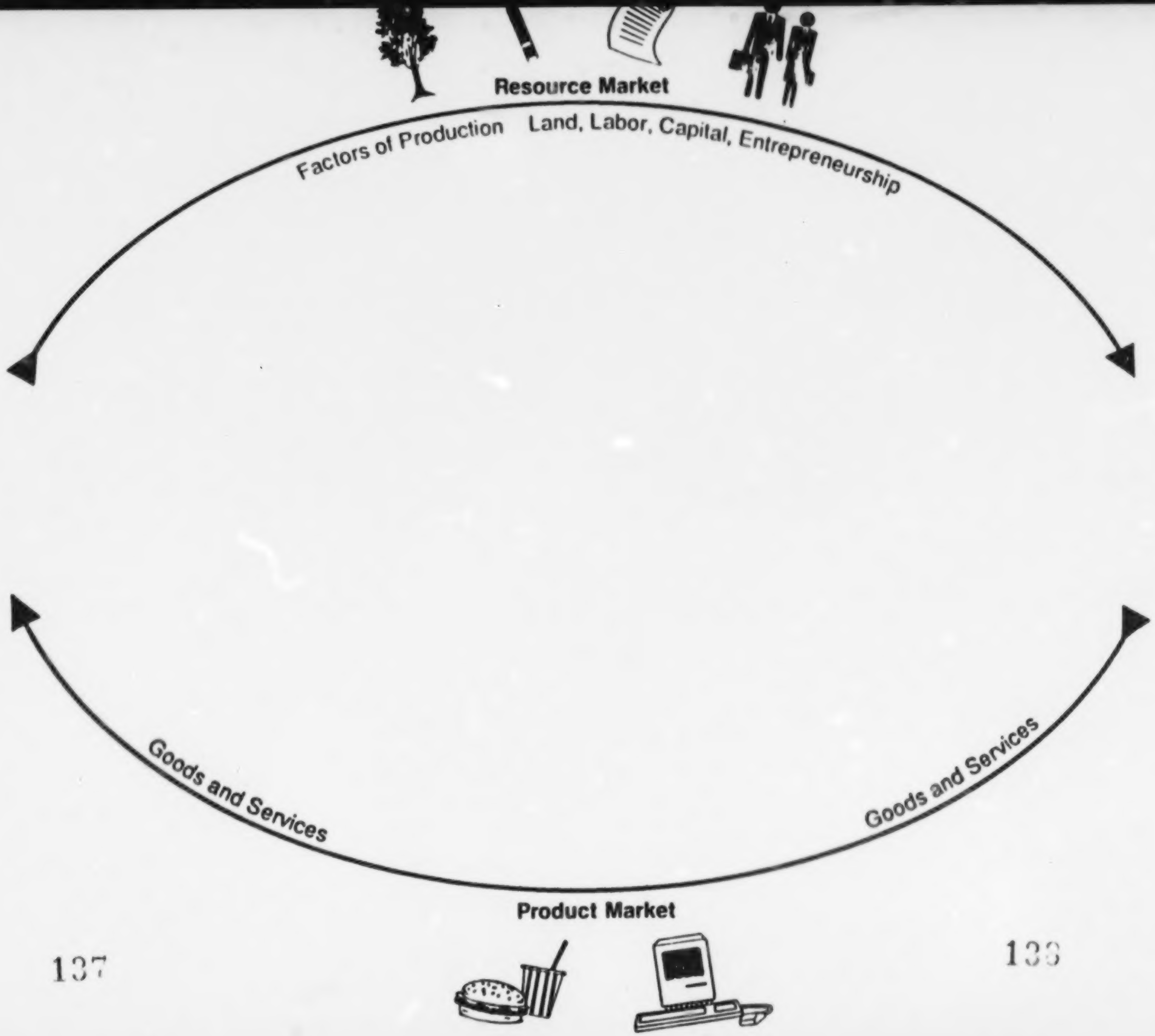
Circular Flow of Economic Activity

Households



Business Firms


1st NATIONAL BANK
ACME



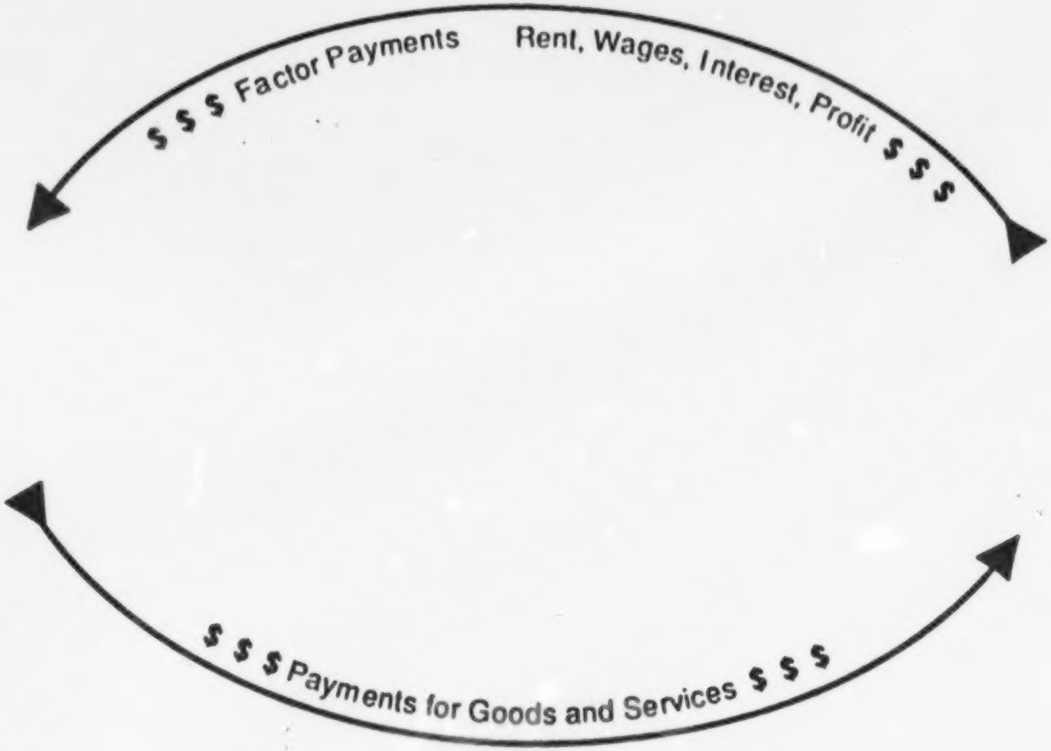
Resource Market

Factors of Production Land, Labor, Capital, Entrepreneurship

Goods and Services

Goods and Services

Product Market


$ $ $ Factor Payments
Rent, Wages, Interest, Profit $ $ $
$ $ $ Payments for Goods and Services $ $ $

SUBJECT OBJECTIVE BY GRADE LEVEL

The matrix identifies a range of suggested introductory grade levels for each of the recommended subject objectives found in section IV. Some pupil performance objectives may be selected and introduced at lower grades with the anticipation that additional instruction will lead to the completed learning of a subject objective at a higher grade/developmental level. Each district will select those pupil performance objectives for instruction at appropriate grade level and to compliment other curriculum needs.

Program Objective A:
How individuals and societies make choices to satisfy wants with limited resources.

Subject Objective	Grade Levels for Introduction			
	K-2	3-5	6-8	9-12
1. The student will recognize that all people have wants.	X			
2. The student will explain how factors of production (productive resources) are used to produce goods and services.		X		
3. The student will explain why people's wants are greater than their resources.	X			
4. The student will analyze why trade-offs must be made when resources are used.		X		
5. The student will explain why resource scarcity requires governments, and societies to make individuals, economic choices to satisfy wants.		X		
6. The student will explain why, when choices are made for the satisfaction of wants, some wants will be foregone.		X		
7. The student will explain how an economic system is the framework within which decisions are made by individuals and groups.		X	X	
8. The student will explain the importance of making informed personal financial decisions.		X	X	

Program Objective B:
How individuals and households exchange their resources for the income they use to buy goods and services.

Subject Objective	Grade Levels for Introduction			
	K-2	3-5	6-8	9-12
1. The student will recognize that individuals and households consume goods and services to satisfy wants.	X			
2. The student will explain how individuals and households supply the factors of production (productive resources): (natural), labor (human), capital, and entrepreneurship.		X		
3. The student will explain why individuals and households voluntarily exchange productive resources for income.		X	X	
4. The student will explain that individuals and households use income to consume goods and services.		X		
5. The student will analyze how individuals, households, and societies make economic decisions based on their self-interests and personal satisfaction.		X	X	
6. The student will describe and compare the roles that individuals assume as consumers and resource suppliers.		X	X	
7. The student will explain how the demand for resources is derived from the demand for goods and services.			X	
8. The student will explain the role and impact of labor organizations in a market economy.			X	X
9. The student will explain how individual and household decisions have benefits and costs.			X	
10. The student will explain that individuals and households use their incomes to consume or save.			X	X

Program Objective C:
How individuals and business firms use resources to produce goods and services and generate income.

Subject Objective	Grade Levels for Introduction			
	K-2	3-5	6-8	9-12
1. The student will understand that individuals and business firms produce goods and services.		X		
2. The student will identify the basic economic questions.		X	X	
3. The student will identify the factors of productions (productive resources) used to produce goods and services.			X	
4. The student will explain ways that productive resources can be used efficiently.			X	X
5. The student will evaluate the benefits and costs of an investment in capital.			X	X
6. The student will explain how trade-offs are involved in decisions to use productive resources.			X	
7. The student will explain and analyze how decisions to increase production are based on the additional cost (marginal cost) and additional benefit (marginal benefit) that result from the increase in production.				X
8. The student will identify the payment to each of the factors of production (productive resources).			X	X
9. The student will explain how investment results in the production of new capital.			X	X
10. The student will explain how profit is an incentive for entrepreneurs.			X	X
11. The student will identify and compare the various forms of business organization.				X

Program Objective D:
How societies use forms of money to facilitate economic exchanges.

Subject Objective	Grade Levels for Introduction			
	K-2	3-5	6-8	9-12
1. The student will recognize that people willingly exchange goods and services in markets to satisfy wants.	X	X		
2. The student will identify barter as the simplest form of exchange.	X	X		
3. The student will recognize the role of money in an economy.		X	X	
4. The student will identify the roles of financial institutions.		X	X	
5. The student will understand the purposes of savings and credit.		X	X	X
6. The student will recognize the role of the Federal Reserve System in the United States economy.				X

Program Objective E:
How markets allocate goods and services.

Subject Objective	Grade Levels for Introduction			
	K-2	3-5	6-8	9-12
1. The student will explain how resources, goods, and services are exchanged in markets.		X	X	
2. The student will recognize the role of consumer preferences in markets.		X	X	
3. The student will define the factors which determine the demand for goods and services.			X	X
4. The student will explain how goods and services are supplied in a market.			X	X
5. The student will recognize the factors that determine the supply of goods and services.			X	X
6. The student will illustrate that the market clearing (equilibrium) price is the price at which there is neither a shortage nor a surplus.			X	X
7. The student will explain the allocative role of prices in markets.			X	X
8. The student will interpret the interrelationships of markets in an economic system.		X	X	X
9. The student will explain the relationship between two substitute goods.		X	X	X
10. The student will explain the relationship between two complementary goods.		X	X	X

Program Objective F:
How competition affects markets.

Subject Objective	Grade Levels for Introduction			
	K-2	3-5	6-8	9-12
1. The student will explain that competition exists when there are two or more producers (suppliers) of similar products.			X	X
2. The student will identify the factors which determine the degree of competition in a market.		X	X	X
3. The student will describe and compare the characteristics of markets.			X	X
4. The student will recognize that the price and quantity of each good or service bought and sold are affected by the degree of competition in the market.			X	X
5. The student will recognize the price and non-price methods by which business firms compete.			X	X

Program Objective G:
How local, state, and national governments play important roles in a market economy.

Subject Objective	Grade Levels for Introduction			
	K-2	3-5	6-8	9-12
1. The student will describe the economic roles of government in a mixed-market economy.			X	X
2. The student will define and distinguish between public and private goods and services.		X	X	
3. The student will explain that government regulates some economic activities to promote competition, correct externalities, and protect consumers.		X	X	
4. The student will explain how governments redistribute income through taxation and transfer payments.			X	X
5. The student will explain how governments attempt to achieve economic goals.			X	X
6. The student will identify and analyze the typical roles of local, state, and federal governments in the American economy.				X
7. The student will explain the qualities of an efficient system of taxation.			X	X

Program Objective H:
How an economy functions as a whole.

Subject Objective	Grade Levels for Introduction			
	K-2	3-5	6-8	9-12
1. The student will describe how the circular flow model represents interrelationships among households, business firms, and markets.		X	X	
2. The student will identify the factors which determine an economy's production possibilities.		X	X	X
3. The student will identify factors which determine aggregate demand.				X
4. The student will identify factors which determine aggregate supply.				X
5. The student will describe a business cycle.				X
6. The student will explain and evaluate the effects of inflation in an economy.				X
7. The student will explain and evaluate the effects of unemployment in an economy.				X
8. The student will identify the role of a central bank in an economy.				X
9. The student will identify how fiscal policies may affect the level of output and income in an economy.				X

Program Objective I:
How nations with different economic systems specialize and become interdependent through trade.

Subject Objective	Grade Levels for Introduction			
	K-2	3-5	6-8	9-12
1. The student will explain that interdependence occurs when two or more persons, regions, or nations specialize and exchange goods and services to satisfy their wants.		X	X	X
2. The student will recognize that the world's productive resources are unequally distributed among nations.		X	X	
3. The student will explain how nations use their comparative advantages to produce goods and services for trade with other nations.				X
4. The student will explain how international trade is the result of specialization and interdependence among nations.			X	X
5. The student will understand that imports and exports are goods and services exchanged between nations.			X	X
6. The student will explain the significance of a nation's balance of trade.				X
7. The student will explain and evaluate the arguments for and against free trade between nations.				X
8. The student will explain the characteristics of the basic types of economic systems.				X
9. The student will explain the factors which affect the economic development of nations.				X

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